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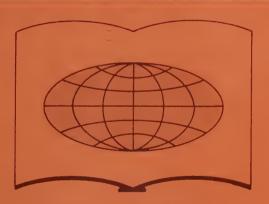


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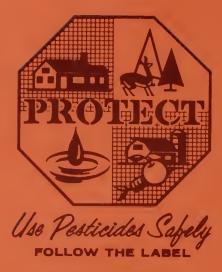
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PESTICIDES DOCUMENTATION BULLETIN

A BI-WEEKLY PUBLICATION OF

U. S. DEPARTMENT OF AGRICULTURE

Volume 4

June 21, 1968

Number 13

OBJECTIVES AND SCOPE

The Pesticides Documentation Bulletin is compiled by the Pesticides Information Center, the first of its kind to be established within a national library, It is a bi-weekly index to the literature on pests and their control and the impact on the economy and man's total environment. The index includes literature on diseases, insects, nematodes, parasites, weeds, and other pests affecting plants, animals, man, our natural resources, and other values in man's environment. Literature on biological, chemical, cultural ecological, mechanical, and integrated methods of pest control will be included. Special emphasis is given to the literature on the toxicological, physiological and epidemiological aspects of pests and their control by chemical and nonchemical methods.

For broader coverage of literature on agriculture and related subjects, please consult the Bibliography of Agriculture, a monthly publication of the National Agricultural Library.

FORMAT

The <u>Bulletin</u> is a categorized bibliography, with citations arranged alphabetically by author under the following major subjects:

- 10 Entomology
- 20 Crop Protection
- 30 Livestock Protection
- 40 Commodity Protection
- 50 Environmental Contamination
- 55 Residues
- 60 Toxicology
- 65 Plant Physiology & Biochemistry
- 70 Chemistry
- 80 Engineering
- 90 Industry

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ACKNOWLEDGMENT

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10 ENTOMOLOGY

Systematics

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13709-6R
   A REVIEW OF THE INDIAN SPECIES OF STERIPHODON ABEILLE
    (COLECPTERA: ANTHICIOAE).
   M Abdullah
   Beitr Entomol 17(3/4):329-335
1967 421 B392
   Insect taxonomy, Steriphodon.
13710-68
   STUDIES OF EUROPEAN AND ASIA MINOR SPECIES OF THE GENOS
   H ASPOCK O ASPOCK
Schweiz Entomol Ges Mitt 39(1/2):33-48
15 Ser 1966 420 SW6
Raphidia.
Includes n. spp.
  3711-68
A NEW MARYLANO RECORD OF THELOHANIA (NOSEMATIOAE:
MICROSPORIDIA).
W W Barnes R W Dewey
J Invertebrate Pathol 9(3):354-356
Sep 1967 421 J826
Aedes canadensis, Larvae, Thelohania inimica.
   Abstract
13712-68
   SOME CETHOPTEBOID INSECTS OF THE ORDERS BLATTCPTERA, ORTHOPTERA AND DEEMAPTERA FROM APGHANISTAN. (RUS) G Ya Eei-Bienko
   Acta Ent Rohemoslov 64(6):407-438, REF. 20 Nov 1967 420 C33
   Dermaptera, Drymapedes, Microdrymadnsa, Orthoptera.
English snumary.
includes 2 n.g. and 13 n.sp.
   ATHYSANELLA ATTENUATA AND A CLOSELY RELATED NEW SPECIES
   PROM KANSAS (ROMOFTERA: CICADELLIDAE) .
   H D Rlocker
   Kans Entomol Soc J 40 (4):576-578
Oct 1967 420 K13
   Agropyrcn smithi, Athysanella attenuata, Athysanella redacta,
Cicadellidae, Insect taxonomy.
   SCME INTERESTING RHOPALOCERA PROM EASTERN SPAIN. (PR )
   Lambillionea 66(5/6):44-45
25 Apr 1967 420 N15
Rhopalocera.
13715-68
   ELECTRON MICROSCOFY OF TRE STRIPTED ROROER OF THE MIGGOT CELLS OF JAVESELLA PELLOCIOA (P.) (HOMOPTERA, OELPHA-
   J Brcak O Kralik
   Acta Ent Bohemoslov 64(3):173-174
1967 420 C33
   Cells, Delphacidae, Electron microscopy, Insect histology,
Intestines, Javesella pellncida.
13716-68
   PIELD OBSERVATIONS ON TWENTY-EIGHT BROODS OF PLOODWATER
   MOSQUITOES RESULTING FROM CONTROLLED PLOODINGS OF A NATURAL HABITAT IN THE TENNESSEE VALLEY.
  MARITAT IN THE TERRESSEE VALLEY.
S G Breelano E Pickard
Mosgnito News 27(3):343-358 REP
Sep 1967 421 m85
Cnlicidae, Insect adaptation, Insect behavior, Insect ecology,
Metamorphosis, Watershed management.
13717-68
  A PORTABLE ASPIRATOR FOR COLLECTING MOSQUITOES.
H D Carver
Mosguito News 27(3):428-429
Sep 1967 421 885
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Culicidae, Insect collecting equipment, Suction traps.
13718-68
  PREDICTING INPLOXES OF ABORS VEXANS INTO URRAN AREAS.
  Mosgnito News 27 (2):156-163 REP
Jun 1967 421 MB5
  Jun 1967 421 885
Aedes vexans, Chemical control (insects), Culicidae,
Insect migration, Insect outbreak forecasting,
Insect physiology, Weather.
Abstract: An empirical conve showing the relationship between the rate of development of the aguatic stages of
  Aedes verans and average daily temperature was derived from mosquito light-trap data and weather data.
  ANOPHELES EARLEI VARGAS, AN ADDITION TO THE CHECKLIST OF
   NEW JERSEY MOSQOITORS.
   W J Crans
  Mosguito News 27 (3):430 REP
Sep 1967 421 #85
Anopheles earlei, Chlicidae.
  SOME DISTINCTIONS RETWEEN THE LARVAE AND PUPAE OF TRE EMPIDIDAE AND DOLICHOPODIDAE (DIPTERA).
  C E Dyte
   Roy Entomol Soc London Proc Ser A Gen Entomol
  42(7):119-12R REP
26 Sep 1967 420 LR4PA
  Dolichopodidae, Empididae, Insect morphology, Larvae, Pnpae. Abstract
13721-6R
PIRST RECORD OF PAUROPOOA IN CULTIVATED LANDS AT GIZA
  A B El-Kifl
Soc Entomol Egypte Boll 49:277-279 REP
1966 420 EG9
  Pauropoda.
13722-6B
  ERIMOCOCCOS, A NEW GENUS FOR LIMONIASTRI OF PRIESMER AND ROSNY (ROMOPTERA: COCCOIORA-PSEUDOCOCCIOAE).
  Y M Ezzat
Soc Entomol Egypte Rull 49:169-173
  1966 420 EG9
Erimococcus.
  Described, 1935, in Phenacoccus.
  AEGYPTOCOCCUS, A NEW GENUS POR INERMIS OF HALL (HYMOPTERA:
  COCCOIDEA-PSEUDOCOCCIOAE) .
  Y M Ezzat
  Soc Entomol Egypte Rnll 49:163-167
  1966 420 EG9
  Aegyptococcus
  Regyptococus:

described by Hall, 1925, in Phenacoccus; genotype of

Rorchsenins, Mirococcus, 19479
13724-68
  ANOPHELES STEPRENSI LISTON IN EGYPT, OAR.
  A M Gad
  Mosgnito News 27 (2):171-174 REP
Jun 1967 421 M85
  Anopheles stephensi, Insect ecology, Zoogeography.
13725-68
  IN VITRO PRAGOCYTOSIS OF NOSEMA APIS SPORES BY HONEY-REE
  HEMOCYTES.

M Gilliam H Shimannki
  J Invertebrate Pathol 9(3):387-389
Sep 1967 421 JB26
Apis mellifera, Blood cells, Nosema apis, Phagocytosis.
  Abstract
  MORPHOLOGY OF TRE INTERNAL REPRODUCTIVE ORGANS OF THE
  NAVEL ORANGEWORK, PARAMY ELOIS TRANSITELLA.
G Haniotakis P # Snmmers
Pla Entomol 51(1):1-9 REP
  Mar 1968 420 P662
  Insect morphology, Paramyelois transitella, Phycitidae, Reproductive organs.
Abstract
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NEW DOLICROPOOIAE PROM CANADA, MEXICO, AND THE WESTERN ONITED STATES (DIPTERA).

P C Harmston

10 13728-68

Entomol News (Philadelphia) 79(1):13-27 Jan 1968 421 EN88 Dolichopodidae, Insect taxonomy, Zoogeography.

13728-68
A NEW SOMATINA FBOM THE CONGO (LEPIDOPTERA GEOMETRIDAE).
(PR
C Rerbulot
Lambillionea 66 (5/6):42-43
25 Apr 1967 420 N15
Somatina hombergi.

13729-68
THEOPHILEA CYLINDBICOLLIS PIC, A LONGICORN NEW FOR CENTRAL EUROPE (COL., CERAMBYCIDAE). (GE)
L Heyrovsky
Acta Ent Bohemoslov 64(3):235
1967 420 C33
Cerambycidae, Insect taxonomy, Theophilea, Zoogeography.

13730-68
ON ALPINE ROSE- AND GRASS-INFESTING SPECIES OF METOPOLO-PHIUM MOROVILKO, 1914, WITH DESCRIPTIONS OF TWO NEW SPECIES (HOMOFTEBA, APHIDIDAE).
D Hille Ris Lambers
Schweiz Entomol Ges Mitt 39(1/2):103-117
15 Sep 1966 420 SW
Aphididae, Grasses, Metopolophium, Rosa.
Includes M. montanum and M. alpinnm, n. spp.

13731-68
COLONIZATION OF CHIRONOMUS PLUMOSUS (DIFTERA: CRIRONOMIDAE).
W L Hilsenhoff R F Narf
Mosquito News 27(3):363-366 BEF
Sep 1967 421 M85
Chironomidae, Chironomus plumosus, Insect rearing.

13732-68
TAIONOMIC REVIEW: MIRIDAE OF THE NEVADA TEST SITE AND THE WESTERN UNITED STATES.
H R Knight
Brigham Young Univ Sci Bull Biol Ser 9(3),282 P
03 Jan 1968 500 B76
Miridae.

13733-68
A BEVISION OF THE HOLARCTIC GENUS DIKRANEURA (HOMOPTERA: CICADELLIDAE).
W J Knight
Brit Mus (natur Hist) Entomol Bull Suppl 21(3):99-201 REP 1968 420 R773
Cicadellidae, Homoptera, Insect taxonomy, Taxonomy, Zoogecgraphy.
Abstract: The genus Dikraneura consists of thirty-three species and is predominantly Nearctic in distribution with only three species, D. variata Hardy, D. aridella (Sahlberg) and D. denticulata sp. n., occuring in the Palaearctic region. Two major groups, separated on the basis of male genitalia, each with several species—complexes, can be recognized.

13734-68
A NEW SUBSPECIES OF CYNANDRA OPIS DBUBY. (FR)
M Lapnel
Lambillionea 66 (3-4):23-25
20 Apr 1967 420 N15
Cynandra opis bernardii.

NOTES ON THE BIOLOGY AND DISTBIBUTION OF SOME DELAWARE MOSQUITOES.

B W Lake
Mosquito News 27(3):324-331 MAPS, REF
Sep 1967 421 M85
Cnlicidae, Zoogeography.
Abstract: Two new Delaware records, O. alba and A.
fitchii, are reported and new locality records for three rare species P. howardii, A. aurifer and A. infirmatus are listed for the State. Notes on the biology of A.
grossbecki and A. thibaulti, as well as locality data, are included and a first observation of mating of A.
thibaulti is described.

13736-68
LABOBATORY GRSERVATIONS ON CEBTAIN MOSQUITO LARVAL PBEDATORS.
P C Lee
Mosguito News 27(3):332-338 REP
Sep 1967 421 #85

Biological control (insects), Culicidae, Larvae, Predaceous insects. Abstract: The number of immature mosquitoes consumed by predators depends npon several factors, including the following: the kind of predators; the size of the predators; the size of the predators; the size of the predators; and probably many other factors.

13737-6B

SPECIES NEW FOR TRE BELGIAN FAUNA. (PR)
A Legrain
Lambillionea 66 (3-4):17-18. (CONT.)
2U Apr 1967 420 N15
Schrankia hnmidalis.

13738-68
A NEW SPECIES OF TRE PSEUDOSCORPION GENUS PAROBISIUM PROMUTAH (APACHNIDA, CHELONETHIDA, NEOBISIIDAE).
W B MICHMOTE
ABER Midland Natur 79(2):531-534 REF
Apr 1968 410 M58
Arachnida, Chelonethida, Taxonomy.
Abstract: The new species, Parobisium utahensis, is similar to P. vancleavei (Hoff) from Colorado, and intermediate in size and proportions hetween the forms known from Oregon and from California. The morphology of the cheliceral flagelum is compared with that of some other neobisiine species and genera.

13739-68
PRYTOSEIIDAE OF SAND-PINE LITTEB.
M H Mnma
Pla Entomol 51(1):37-44 REP
Mar 1968 420 P662
Porest litter, Mites, Phytoseiidae, Pinus clansa.
Abstract

13740-68
NOTES ON CECIDONYIDAE. I.
W Nijvelot
Entomol Ber 27(1):8-14 REP
01 Jan 1967 420 N38B
Cecidomyiidae.

13741-68
RESEABCR NOTES ON AEDES AEGYPTI PEEDING ON THE EASTEPN GARTER SNAKE THAMNOPHIS SIRTALIS SIRTALIS.
W G Pearson B A Harrison
Mosguito News 27 (2):199
Jnn 1967 421 MB5
Aedes aegypti, Peeding, Insect behavior, Snakes.

13742-68
THE INSECT INRABITANTS OF UNDISTURBED CATTLE DROPPINGS IN NORTHERN CALIFORNIA.
J H Poorbangh J R Anderson J F Burger
Calif Vector Views 15(3):17-36 REF
Mar 1968 449.8 C12
Cattle, Peces, Rabitats, Haematobia irritans, Insects,
Musca antumnalis, Natural control (insects).
Righ Raematobia irritans and Husca autumnalis populations may be due to scarcity of natural enemies in compats.
Abstract

13743-68

THE EPPECT OF CEBTAIN INSECTICIDES ON THE ENTOMOGENOUS PUNGI BEAUVEPIA BASSIANA AND METARHIZIUM ANISOPLIAE.

N V Ramarate Urs H C Govindu K S Shivashankara Shastry J Invertebrate Pathol 9(3):398-403 REP Sep 1967 421 JB26 Beauveria bassiana, Benzene hexachloride, DDT, Endrin, Entomogenous fingi, Insecticides, Malathion, Metarrhizium anisopliae, Parathion, Phosphamidon. Abstract

13744-68
ACABINA TRBOMBIDIIDAE OF MADAGASCAR. (FR)
P Robauy
Paris Mus Nat Hist Natur Bull 38(5):629-637
1966 410.9 P213
Insect taxonomy, Halagasy Republic, Mites, Trombidiidae.

3745-68
CONTBIRUTION TO TRE KNOWLEDGE OF TRE CRIMESE COLLEMBOLA (APTERYGOTA). (GE)
J Rusek
Acta Ent Bohemoslov 64(3):184-194
1967 420 C33
Chinogastrura, Collembola.

Chiefly n. spp. and includes Chinogastrnia n. g.

13746-68

ICONOGRAPHY OF LEFIDOPTERA EGGS IN THE RELGIUM FAUNA. (PR)
L G Sarlet
Lambillionea 66(3-4):28-329 (CONT.)
20 Apr 1967 420 N15
Insect eggs, Lepidoptera.

13747-68

SCULPTURING OF THE EGGS OF THE LEPIDOPTERA FAUNA OF

SCULPTURING OF THE EGGS OF THE LEPIDOPTERA FAUNA RELIGIUM. (PR)
L G Sarlet
Lambillionea 66 (5/6):45-48. (CONT.)
25 Apr 1967 420 N15
Hesperiidae, Insect eggs, Pyrgns.

13748-68
AN IMPROVED CARROW DIOXIDE STICKY CYLINDER TRAP.
E P Schoeppner R H Whitsel
Mosquito News 27(2):185-186 REP
Jnn 1967 421 H85
Carbon dioxide, Ceratopogonidae, Insect traps,
Leptoconops torrens.

13749-68
STUDIES ON THE MOSS MITES OF SNOWDONIA (ACARI: ORIRATEI).

1. MOEL REROG.
E. L. Seyd
Entowologist (london) 101(1257):37-41 REP
Feb 1968 421 EN8
Animal ecology, Lichenes, Musci, Oribatei, Zoogeography.

13750-68
CONTRIBUTION TO THE KNOWLEDGE OF TRE DADDY LONGLEGS FAUNA OF THE SCYLET CENTRAL ASIA (ABACE., OPILIONIDEA). (GE) V Silhavy
Acta Ent Rohemoslcv 64(6):472-478
20 Nov 1967 420 C33
Phalangida.

13751-68

KEYS FOR THE IDENTIFICATION OF POLISH INSECTS. XIX. COLEOPTEBA. PABT 9BR. CURCULIONIDAE, OTIOBRYNCHINAE, BRACRYDERINAE. (POL)
S Smreczynski
Pol Tow Entomol Kincze Oznaczania Owadow Pol
19(982),130 P. KEF.
1966 422.59 P76
Coleoptera, Curculionidae, Insect identification.

3752-68
DYNAMICS OF AEDES AEGYPTI DISTRIBUTION AND DENSITY.
SEASONAL PLUCTUATIONS IN THE AMERICAS.
P L Soper
World Health Organ Bull 36 (4):536-538
1967 449-9 W892R
Aedes aegypti, Insect populations, Zoogeography.

13753-68
MEDOCOSTIDAE-A NEW FAMILY OF CINICONORPHAN HETEROPTERA
BASED ON A NEW GENUS AND TWO NEW SPECIES FROM TROPICAL
AFRICA. I. DESCRIPTIVE PART.
P Stys
Acta Ent Rohemoslov 64(6):439-465
20 Nov 1967 420 C33
Heteroptera, Medocostes, Medocostidae.
Includes M. carayoni, also a n.sp.

13754-68
LIPOKCPHILA CHINAI GEN N SP N; A NEW GENUS OF PLOKIO-PHILICAE (AETEROPTERA) FROM ERAZIL.
P Stys
Acta Ent Rohemoslov 64(4):248-258
1967 420 c33
Lipokophila chinai, Plokiophilidae.

13755-68

TYPE SPECIMENS OF CHIBONOMIDAE (DIPTERA) IN THE CORNELL UNIVERSITY COLLECTION.

J E Sublette

Kans Entomcl Soc J 40(4):477-564 REP
Oct 1967 420 K13
Chironomidae, Insect taxonomy.
Abstract

13756-68
TARANIDAE OF MARYLAND.
PH Thompson
Amer Entomol Soc Trans 93(4):463-519, MAP REP

Dec 1968 420 P53 Surveys, Tahanidae. Includes keys

13757-68
ENTOMOLOGICAL BIBLIOGRAPHY OF RAJA CALIFORNIA. Z5R59.M6T7. (SP
P Trujillo G
53 P.
1967
Eibliography, Entomology, Insects.

3758-68
CONTRIBUTION TO THE KNOWLEDGE OF THE ROBNEAN PSENINI (HYMENOPTERA, SPRECIDAE).
J P Van Lith
Entomol Her 27(1):15-20
O1 Jan 1967 420 N38E
Psenulus maai, Sphecidae.
Includes p. maai n. sp.

13759-6R
HOVER-PLIES IN THE LEYDEN ROTANICAL GARDEN (DIPT., SYRPH.). (DU)
S J Van Ooststroom
Entowol Rer 26(12):230-232
O1 Dec 1966 420 N3BR
Diptera, Syrphidae.
English summary.

1376U-68
ENUMERATION OF MICROLEPIDOPTERA ENCOUNTERED IN THE WARSAGE REGION. (PR)
J M Warlet
Lambillionea 66(3-4):18-23
20 Apr 1967 420 N15
Lepidoptera.

3761-68
SUPPLEMENTARY DATA ON TRE ANDROCONIAL SCALES OF SOME ROLARCTIC SPECIES PIERLS (LEPIDOPTERA).

B C S Warren
Entomol Rec J Variation 79(5):139-143
May 1967 421 EN89
Pieris, Scales (insects).

13762-68

HEDESCRIPTION OF SYCOPHAGINAE PROM CEYLON AND INDIA,
WITH DESIGNATION OF LECTOTYPES, AND A WORLD CATALOGUE OF
THE OTITESELLINI (HYMENOPTERA CHALCIDOIDEA, TORYMIDAE).
J T Wiehes
Tijdschr Entomol 10(13):399-442
1967 421 T21
Cycophaginae, Ficus, Otitesellini, Sycoryctes religiosae,
Torymidae.
Abstract

13763-68
PUPAL PAEDOGENESIS IN THE CECIDOMYIIDAE (DIPTERA). 3. A
RECLASSIFICATION OF TRE HETEROPEZINI.
I J Wyatt
Roy Entomol Soc London Trans 119 (3):71-98 REF
27 Jnn 1967 420 LB4
Cecidomyiidae, Heteropezini, Heteropeznla, Larvae,
Miastor castaneae, Reproduction.

Physiology and Biochemistry

13764-68
SOME ORSERVATIONS ON ORYZAEPHILUS SURINAMENSIS L. (COL., SILVANIDAE) IN A TEMPERATURE-HOISTURE GRADIENT.
T G Amos
Entomologist (London) 101(1258):68-70
Mar 1968 421 EN8
Grain moisture, Oryzaephilus surinamensis, Stored products, Temperature gradients.

13765-68

COMPARATIVE STUDIES ON THE REHAVIOUR OF THREE SPECIES OF ANTS (RYMENOPTER A: FORMICIDAE). I. PREY FINDING, CAPTURE, AND TRANSPORT.
G L Ayre

1D 13766-68

Can Entomol 1DD (2):165-172 Feb 196B 421 C16 Crematogaster lincolata, Formica obscuriventris, Formicidae, Myrmica americana. Abstract

A FIVE-YEAR STDDY OF POTENTIAL WESTERN CORN ROOTWORM RESISTANCE TO DIAZINON AND PHORATE IN NEBRASKA. H J Ball J Econ Entomol 61(2):496-498 BEF Apr 1968 421 J822 Corn, Diabrotica virgifera, Diazinon, Insecticide resistant insects, Nebraska, Phorate.

THE SECRETORY ACTIVITY OF CORPORA ALLATA DDRING SEXUAL MATURATION AND IMAGINAL DIAFAUSE IN GRYLLUS DOMESTICUS L AND LEPTINOTARSA DECEMLINEATA SAY. T G Belyaeva Acta Ent Bohemoslov 64(1):1-15 REP 1967 420 C33 Acheta domesticus, Corpora allata, Insect physiology, Leptinotarsa decemlineata, Secretion.

13768-68

SPECIFICITY OF THE CAEBAGE LOOPER SEX ATTRACTANT.
R S Berger T D Canerday
J Econ Entomol 61(2):452-454 Apr 1968 421 J822 Apt 1766 421 JO22 Autographa biloba, Biological assay, Dodecenyl acetate, cis-7-, Pseudoplusia includens, Rachiplusia ou, Sex attractants, Trichoplusia ni. Abstract

13769-68

EFFECTS OF CHEMOSTERILANTS AND GROWTH REGULATORS ON THE PEA AFHIC PED AN ARTIFICIAL DIET.
O P Bhalla A G Robinson J Econ Entomol 61(2):552-555 Apr 1968 421 J822 Acyrthosiphon pisum, Chemosterilants, Chlorcethyl trimethylammonium chloride, 2-, Diet, Maleic hydrazide, Oxodec-trans-enoic acid, 9-, Plant growth inhibitors. Abstract

13770-6B
EFFECT OF TEMPERATURE ON PREDATION OF HORN PLY LARVAE BY THE LARVAE OF SPHAERIDIUM SCABABABOIDES. J R Bourne K L Hays
J Econ Entomol 61(1):321-322 Feb 1968 421 J822 Haematobia irritans, Predaceous insects, Sphaeridinm scarabaeoides, Temperature.

13771-68

FREQUENCY OF MATING BY THE FEMALE ONION MAGGOT ADULT. D B Broersma W H Luckmann J Econ Entomol 61(4):568 Apr 1968 421 J822 Hylemya antiqua, Sex behavior.

CHOLINESTERASE IN BOLL WEEVILS, ANTHONOMUS GRANDIS BOHEMAN. I. DISTRIBUTION AND SOME PROPERTIES OF THE CBUDE ENZYME.
D L Bull D A Lindquist Compar Biochem Physiol 25(2):639-649 REP May 1968 444.8 C73 Anthonomus grandis, Biochemistry, Cholinesterases. Abstract: 1. Horogenates of adult boll weevils, apparently contained only one enzyme that catalyzed hydrolysis of choline esters. 2. The enzyme was primarily associated with the particu-late fraction of homogenates and was almost evenly dis-tributed between the abdomen and the head plus thorax. 3. Based on information obtained from studies of substrate specificity, eserine inhibition, and the influence of substrate concentration, pH.and temperature on activity, the enzyme was tentatively classified as an acetylcholinesterase. 4. In adult weevils of a colony reared in continuous light, the levels of AChE were relatively constant during a 24-hr. period; however, when the weevils were reared with a 14L-10D daily photoperiodic regimen, enzyme activity definitely was higher in weevils during the light hours.

13773-68 SYNTHETIC CHEMICAL SEX STIMULANTS FOR CODLING MOTR. B A Butt M Beroza T P McGovern S K Preeman J Econ Entomol 61(2):570-572 Apr 1968 421 J822 Biological assay, Carpocapsa pomonella, Sex attractants.

13774-68

THE BIOLOGY AND LIPE HISTORY OF NOSEMA TBACHEOPRILA SP N (PROTCZOA: CNIDOSPORA: MICROSPOBIDEA) FODND IN COCCINELLA SEPTEMPUNCTATA LINNAEDS (COLEOPTEBA: COCCINELLIDAE).
A Cali J D Briggs J Invertebrate Pathol 9(4):515-522 REP Dec 1967 421 J826 Coccinella septempunctata, Insect diseases, Nosema tracheophila.
Comparative table of Nosema reported in Coleoptera Abstract

13775-68

SPASONAL CHANGES IN DAILY ACTIVITY PERIODS OF TRE SWEETCLOVER WEEVIL. C O Calkins G R Manglitz J Econ Entomol 61(2):391-394 Apr 1968 421 J822 Insect behavior, Light, Nebraska, Sitona cylindricollis, Temperature. Abstract

13776-68

PLISTOPHORA CAECORUM SP N, A MICROSPORIDIAN OF CULISETA INOBNATA (DIPTERA: CDLICIDAE) PROM LOUISIANA.

H C Chapman W R Kellen J Invertebrate Pathol 9(4):500-502 1967 421 JB26 Culicidae, Culiseta inornata, Insect diseases, Plistophora caecornm. Abstract

13777-6B

PREE AMINO ACIDS AND DEBIVATIVES IN EGGS OF DROSOPRILA, CULEX AND PHORMIA. (GE)
P S Chen F Hanimann H Briegel
Rev Suisse Zool 47(3):57D-589 REF
Dec 1967 410 B324 Amino acids, Amino componnds, Culex pipiens gninguefasciatns, Drosophila melanogaster, Insect eggs, Phormia regina. English summary.

SYSTEMIC INSECTICIDES FOR CONTROL OF ORIENTAL BAT PLEAS: BAIT TESTS WITH HOODED WHITE RATS.
P H Clark M M Cole J Econ Entomol 61(2):505-508 Apr 1968 421 J822 Baits, Chemical control (insects), Insecticides, Bats, Xenopsylla cheopis. Abstract

THE LIPE HISTORY AND MORPHOLOGY OF ADELGES LABICIATUS (HOMOPTERA: PHYLLOXERIDAE). M E P Cumming
Can Entomol 10D(2):113-126
Peb 1968 421 C16
Chermes lariciatus, Insect behavior. Abstract

13780-68

DEVELOPMENT OF THE PAT BODY IN CALLIPHORA ERYTROCEPRALA MEIG. lARVA. (GE) D Dahlhelm Biol Zentralbl 86(3):273-301 REP May 1967 442.8 B523 Calliphora vicina, Pat body, Insect physiology. English and German snmmaries Abstract

13781-68

THE EPPECT OF HEAT, COLD, AND PROLONGED STORAGE ON A GRANULOSIS VIRUS OF PIERIS BRASSICAE.
W A L David B O C Gardiner J Invertebrate Pathol 9(4):555-562 Dec 1967 421 JB26 Cold, Granuloses, Heat, Insect diseases, Pieris brassicae, Storage. Abstract

13782-68

EFFECTS OF DIETARY LIPIDS ON SURVIVAL AND DEVELOPMENT OF THE SAW-TCOTRED GBAIN BEETLE, ORYZAFPHILUS SURINAMENSIS (L.) (CCLECPTERA: SILVANIDAE).
G R P Davis

Rev Can 8iol 26(2):119-124 REF
Jnn 1967 442.8 R325
Cncnjidae, Insect physiology, Lipids, Mortality,
Oryzaepbilus surinamensis.

13783-68
CAUSES OF RESISTANCE TO DDT IN A DIAZINON-SELECTED AND A DDT-SELECTED STRAIN OF HOUSE FLIES.
S El Bashier
Entomol Exp Appl 10(1):111-126 REF
1967 421 EN895
DDT, Diazinon, Insecticide resistant insects, Musca domestica

13784-68
EFFECT OF FOST-TREATMENT TEMPERATURE ON TOXICITY OF INSECTICIDES TO RESISTANT AND SUSCEPTIBLE HOUSE FLIES.
E S Evans E J Hansens
J Econ Entomol 61(2):543-546
Apr 1968 421 J822
Diazinon, Insecticide resistant insects, Insecticides, Lindane, Mortality, Musca domestica, Temperature.
Abstract

13785-68
A PRELIMINABY STUDY OF THE LIFE HISTORY OF THE BROAD-NECKED ROOT EORER IN RHODE ISLAND.
R J FARTAR T W KERR
J Econ Entomol 61(2):563-564 REF
Apr 1968 421 J822
Insect hiology, Prionns laticollis.

13786-68
TRE SPECIES OF THE FORM GENUS SPO8OTRICHUM LINK ON IMSECIS.
O Passatiova
J Invertebrate Pathol 9(4):563-566 REP
Dec 1967 421 J826
Coleoptera, Pungi, Insect diseases, Sporotrichum, Tenebrio mclitor.
Abstract

13787-68
AUTOECOLOGY AND REPRODUCTIVE CAPACITY OF MACBOCHELES
BUSCAPHOMESTICAE (SCOFOLI) (ACARI: MESOSTIGMATA). (IT)
A Filipponi M G Petrelli
Riv Parassitol 28 (2):129-156 REF
Jun 1967 436.8 R52
Ecology, Macrocheles muscaedomesticae, Physiology,
Predaceons mites, Reproduction.
English and Italian summaries.
Abstract

13788-68
GAMMA IRRADIATION OF THE TORACCO BUDWORM: STERILIZATION, COMPETITIVENESS, AND OBSE8VATIONS ON REPRODUCTIVE RIOLOGY.
R M Flint E L Kressin
J Econ Entomol 61(2):477-483 REF
Apr 1968 421 J822
Fertility, Gamma rays, Heliothis virescens, Insect physiology, Reproduction, Sex behavior.
Abstract

3789-68
PRELIMINARY 8EPO8T ON SOLUBLE ANTIGEN PLUORESCENT ANTIRODY TECRNIQUE FOR IDENTIFICATION OF HOST SOURCE OF MOSQUITO RLOOD HEALS.
J W Gentry C G Moore D E Hayes Mosgnito News 27(2):141-143 REF
Jnn 1967 421 M85
Aedes aegypti, Anopbeles gnadrimaculatus, Antigens, 8lood, Chickens, Culicidae, Floorescent antihody technic, Monkeys.

3790-68
EXPEBIMENTS ON NUCLEAR TBANSPLANTATION IN DROSOPHILA
MELANOGASTER. PRELIMINARY BEPORT.
I Geyer-Dnszynska
Bev Snisse Zool 47(3):614-615
1967 410 B324
Cell nuclens, Drosophila melanogaster, Insect eggs.

13791-68

MALE PREROHONES OF CULEX QUINQUEPASCIATUS, C. TARSALIS, AND C. PIPIENS THAT ATTRACT FEMALES OF THESE SPECIES.
C M Gjnllin T L Whitfield J P Rnckley
Mosgnito News 27 (3):382-387 REF

Sep 1967 421 M85 Attractants, Culex pipiens, Culex guinguefasciatus, Culex tarsalis, Insect bebavior, Pheromones.

13792-68
TWO SEMIARTIFICIAL OVIPOSITION MEDIA FOR THE SMALLER EUROPEAN ELM BARK REETLE.
R J Gouger D Bray
J Econ Entomol 61(2):564-565
Apr 1968 421 J822
Diet, Insect rearing eguipment, Ips calligraphus, Ovulation, Scolytus multistriatus.
Oviposition, but not hatching, occurred

13793-68
A COMPARISON OF THE TOXICITY OF VARIOUS CARRAMATE, OFGANO-PHOSPHORUS AND ORGANOCHLORINE COMPOUNDS TO THE CODLING MOTH S8951.G7.
M Gratwick R P Tew 276-285
1966
Apples, Carhamates, Carpocapsa pomonella, Chlorinated hydrocarbons, Evaluation, Organophosphorus compounds, Ovipositors, Toxicity.

RESULTS OF 1966 NPCA-SPONSORED RESEARCH AT VPI ON COCKROACH CONTROL.

J M Grayson
Pest Contr 35(6):12-14
Jun 1967 449-8 EX8
Rlattidae, Chemical control (insects), Insecticides, Periplaneta brunnea.

13795-68
ON THE SHAPE AND STRUCTURE OF THE CRYSTAL IN TWO STRAINS OF RACILLUS THURINGIENSIS.
R GRIGOTOVA E Kantargieva N Pasbov
J Invertehrate Pathol 9(4):503-509 REF
Dec 1967 421 J826
Racillus thuringiensis, Crystallography, Electron microscopy.
Abstract

13796-68
THE 8UILDING MECHANISMS OF THE CATERPILLARS OF FUMEA CASTA PALL. (LEPIDOPTERA, PSYCHIDAE).
K Gromysz-Kalkowska
Polia Riol (warsaw) 15(2):145-176
1967 442.8 F71
Caterpillars, Fumea casta, Insect hehavior, Psychidae.
Rag building.

13797-68
EFFECT OF ULTRAVIOLET IRRADIATION ON EGG HATCH, SURSEQUENT
LARVAL DEVELOPMENT, AND ADULT LONGEVITY OF THE TORACCO
RUDWORM AND THE ROLLWORM.
A A Guerra M T Ouye H R Bullock
J Econ Entonol 61(2):541-542
Apr 1968 421 J822
Heliothis virescens, Heliothis zea, Insect eggs,
Insect physiology, Longevity, Sterilization, Ultraviolet rays.
Abstract

13798-68

HATCH, LARVAL DEVELOPMENT, AND ADULT LONGEVITY OF FOUR LEPIDOPTEROUS SPECIES AFTER THERMAL TREATMENT OF EGGS. A A Guerra H T Ouye

J Econ Entomol 61(1):14-16

Peh 1968 421 J822

Heat, Heliothis virescens, Reliothis zea, Insect eggs, Insect physiology, Larvae, Lepidoptera, Longevity, Pectinophora gossypiella, Spodoptera exigua. Abstract

13799-68
COLONIZATION AND MASS PRODUCTION OF THE FALSE WIREWORM ELECODES SUTURALIS.
E W Hamilton J W Matteson
J Econ Entomol 59(1):26-27
Feb 1966 421 J822
Eleodes, Insect rearing, Land settlement.

13800-68
MORPHOLOGY OF THE INTERNAL REPRODUCTIVE ORGANS OF THE NAVEL ORANGEWORM, PARAMYELOIS TRANSITELLA.
G Haniotakis F H Summers
Fla Entomol 51(1):1-9 REF
Mar 1968 420 P662
Insect anatomy, Insect histology, Insect morphology,
Paramyelois transitella, Reproductive organs.

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10 13801-68

Abstract: The gross anatomy is described, and the histoland the driver and associated glands presented in enough detail to suggest general functions of these parts. Peristalsis of the ductus siminalis, as observed in treshly killed females, appears to aid in the transmission of seminal fluid from the corpus hursae to the apical end of the vagina.

13801-68

FUETHER STUDIES OF EFFECTS OF ANTIRIOTICS AND OTRER COM-POUNDS ON FECUNDITY AND MORTALITY OF THE TWO-SPOTTED SPIDER MITE. F H Harries J Econ Entomol 61(1):12-14 Peh 1968 421 3822 Antibiotics, Pertility, Mortality, Purines, Pyrimidines, Tetranychus urticae. Abstract

13RH2-68

MUTILATION AND SUBVIVAL OF STERILE ORIENTAL FRUIT FLIES AND MELON FLIES EMERGING IN DROP ROXES.

E J Harris w C mitchell A H Raumhover L F Steiner
J Econ Entomol 61(2):493-496 Apr 1968 421 J822 Aerial insect control, Dacus cucnrhitae, Dacus dorsalis, Diet, Insect cages, Mortality. Abstract

13803-68

STERILIZATION OF CODLING MOTH BY AEROSOL TREATMENT WITH TFPA. O Hathaway R A Rutt L V Lydin J Econ Entomol 61(1):322-323 Peh 1968 421 J822 Aerosols, Carpocapsa pomonella, Sterilization, Tepa.

13804-68

LARCRATCHY AND FIELD CAGE STUDIES OF THE EFFECTS OF GAMMA RADIATION ON COOLING MOTHS. D O Hathaway J Econ Entomol 59(1):35-37 Peh 1966 421 J822 Carrocarsa pomonella, Gamma rays.

13805-68

CONJUGATION OF 1-NAPHTHOL AND P-NITROPHENOL IN PLIES: PORMATION OF GLUCCSIDE-6-PHOSPHATES.
M P Heenan J N Smith Life Sci 6(16,PT.2):1753-1757 15 Aug 1967 442.8 L62 Biochemistry, Diptera, Glycoside-6-phosphates, Musca domestica, Naphthol, Nitrophenol, Phaenicia.

13806-68

SEASONAL LIPID CONTENT OF RAGWORM LARVAE. E A Heinrichs J Econ Entemol 61(2):585 Apr 1968 421 J822 Riochemistry, Lipids, Pinus strohus, Thyridopteryx.

PACTORS IN THE FHOTOPERIOD CONTROL OF THE SEASONAL FORM IN PULYGUNIA C-AUREUM (LEPIDOPTERA, NYMPRALIDAE). T Hidaka H Takabashi Annot Zool Jap 40(4):200-204
Dec 1967 410 AN79 Insect morphology, Nymphalidae, Photoperiodism, Polygonia c-aureum, Temperature. Abstract

13808-68

TEMFERATURE CONDITIONS AND MATERNAL EFFECT AS MODIFYING TERFERATURE CONDITIONS AND MATERNAL EFFECT AS HODIFYING PRACTORS IN THE PHOTOPERIODIC CONTROL OF THE SEASONAL FORM IN FOLYGONIA C-AUREUM (LEPIDOPTERA, NYMPRALIDAE). T Hidaka H Takahashi Annot Zool Jap 40 (4):200-204 REF Dec 1967 410 AN79 Dec 1967 410 ANT9
Insect morphology, Metamorphosis, Nymphalidae, Photoperiodism, Pclygonia c-aureum, Temperature.
Abstract: While seasonal form in Polygonia c-aureum is mainly determined by photoperiodic conditions dnring the larval period, the photoperiodic reaction undergoes considerable modification by temperature. Moreover, the seasonal form of the maternal generation exerts a marked inflnence on the photoperiodic reaction of the progeny.

13809-68

HORN PLY DISPERSAL. C E Hoelscher R L Combs J R Brazzel
J Econ Entomol 61(2):370-373 REF Apr 1968 421 J822 Raematohia irritans, Insect dissemination.

13810-68

METAROLISM OF INSECTICIDES BY CULEX PIPIENS QUINQUEFASCIATUS. I. IN VIVO METABOLISM OF DDT BY LARVAE. G H S Hooper J Econ Entomol 61(2):490-493 REP Apr 1968 421 J822 Culex pipiens quinquefasciatns, Ddt, Insect metaholism, Insecticides, Larvae. Abstract

13811-68

UPDATE ON RESEARCH AT USDA: S FOREST SERVICE GULFPORT LARORATORY. H R Johnston Pest Contr 35(11):41-42 Nov 1967 449.8 EX8 Chemical control (insects), Chlorinated hydrocarhons, Termites.

13812-68

CHEMOSTERILIZATION OF MALE PEAR PSYLLA WITH TEPA. G H Kaloostian J Econ Entomol 61(2):573-574 Apr 1968 421 J822 Chemosterilants, Insect rearing, Psylla pyricola, Tepa.

STRUCTURE OF ORGANOPHOSPHORUS COMPOUNDS IN RELATION TO CONTROL OF TRE SOUTHERN CHINCR RUG. S H Kerr J Econ Entomol 61(2):523-525 Apr 1968 421 J822 Rlissns insularis, Chemical control (insects), Insecticides, Organophosphorus componeds. Abstract

13814-68

RESPONSE OF THE YELLOW-FEVER MOSQUITO TO VARYING AREAS OF HUMAN SKIN. A A Khan R I Maihach W G Strauss J Econ Entomol 61(2):555-557 Apr 1968 421 J822 Aedes aegypti, Hnmans, Insect hehavior, Skin. Abstract

DEVELOPMENT OF ANGOUNOIS GRAIN MOTHS IN KERNELS OF WREAT, SORGHUM, AND CORN AS AFFECTED BY SITE OF FEEDING. B P Khare B B Mills J Econ Entomol 61(2):450-452 Apr 1968 421 J822 Corn, Feeding, Insect physiology, Sitotroga cerealella, Sorghum, Stored products, Wheat. Abstract

13816-68

ISOLATION OF A SEX PHEROMONE OF THE EUROPEAN CORN RORER. J A Klun J Econ Entomol 61(2):984-987 Apr 1968 421 JB22 Riochemistry, Riological assay, Chromatography, Rormones, Ostrinia nubilalis, Sex attractants.

13817-68

IMMUNOPLUORESCENCE STUDIES ON ROMRYX MORI OVARIAN TISSUE IMMONOPLINGRESCENCE STUDIES ON MOMENTA HORT OVARIAN TISSUE CULTURES INFECTED WITH NUCLEAR-POLYHEDROSIS VIRUS.

J Krywienczyk S S Sohi
J Invertebrate Pathol 9(4):568-570
Dec 1967 421 J826
Rombyx mori, Pluorescent antihody technic, Insect diseases, Ovaries, Polyhedroses, Tissue culture.

13818-68 SOME EFFECTS OF THREE TRIPHENYLTIN COMPOUNDS ON THE

PERTILITY AND LONGEVITY OF JAPANESE REETLES. T L Ladd J Econ Entomol 61(2):577-578 Apr 1968 421 J822 Pertility, Longevity, Popillia japonica, Triphenyltin acetate, Triphenyltin chloride, Triphenyltin hydroxide. 13819-68
LARCRATORY PROCEDURES. IN: PRINCIPLES OF INSECT CHEMOSTERI-LIZATION, G. C. LARRECQDE AND C. N. SMITH, ED. S959.13.
G C LARRECQUE 41-98, REP APPLETON-CENTURY-CROPTS, NEW YORK 1968
Chemosterilants, Insect control, Minsca domestica, Pesticide application. Ribliography, p.89-98

1382D-68
PRINCIPLES OF INSECT CHEMOSTERILIZATION. S959.L3.
G C Larrecque C N Smith
354 P. APPLETCN-CENTURY-CROPTS, NEW YORK
1968
Chemosterilants, Insect control.
Includes introduction by A.w. lindguist

3821-68
CTTOGENETIC AND CELLDLAR RASIS OF CHEMICALLY INDDCED STERILITY IN INSECTS. IN: PRINCIPLES CF INSECT CHEMOSTERILIZATION, G. C. LARRECQDE AND C. N. SMITR, ED. S959.L3.
L E Lachance D T North W Klassen
99-157, REF APPLETON-CENTURY-CROPTS, NEW YORK
1968
Cells, Chemosterilants, Cytogenetics, Insect control,
Sterility.
Ribliography, p.146-157

13R22-68
RIOLOGY OP TIPULA PALUDOSA; GROWTR OF THE LARVA IN TRE FIELD.
R Laughlin
Entomol Exp Appl 1D(1):52-68 REP
1967 421 EN895
Insect biology, Insect ecology, Larvae, Tipula palndosa.

3823-68
PHOTOTACTIC CHOICE RETWEEN TWO WRITE LIGHT SODRCES OP VARIODS INTENSITY IN RLOWPLY, CALLIPHORA ERYTHROCEPHALA MEIG.
R Lipinska-skawinska J & Chmurzynski Experientia 24(3):283-284 REP 15 Mar 1968 475 EX7 Calliphora vicina, Insect behavior, Light, Phototropism. German snmmary

JAR 24-68
INPLOENCE OF THE PROPORTION OF PROITING TO NON-PRUITING CLUSTERS ON TRE DISTRIBUTIOR OF INSECT PREDATORS ON APPLE TREES.
P T Lord
Can Entowool 100(3):308-312 REF
Mar 1968 421 C16
Apples, Prnit, Mites, Predaceons insects.
Abstract: The mirids Atractotomns mali, Campylomma verbasci, Hyaliodes harti, Diaphnocoris pellucida, Philophorns perplemns and the anthocorid Anthocoris muscus all showed greater preference for limbs (or trees) hearing a high proportion of frniting clusters. The mite Anystis agilis exhibited no preference.

13825-68
ORSERVATIONS ON FEEDING AND MOVEMENT OF TORACCO RORNWORM
LARVAE.
M W McFadden
J Econ Entomol 61(2):352-356
Apr 1968 421 J822
Peeding, Insect hehavior, Larvae, Manduca sexta, Tohacco.
Abstract

13826-68

PIELD TESTS WITH A NUCLEAR POLYREDRAL VIRUS AGAINST THE ROLLWCRK AND TORACCO RUDWORK, 1964-1966.

R L McGarr
J Econ Entomol 61(1):342
Peh 1968 421 J822
Riological control (insects), Cotton, Heliothis virescens, Reliothis zea, Insect diseases, Polyhedroses, Spraying.

A SIMPLE METHOD OF MOSQUITO OVARY DISSECTION.

K E Meadows
Pla Entowol 51(1):31-35 REP
Har 1968 42D P662
Culicidae, Dissection, Ovaries.
Abstract: An illustrated description of step-by-step
dissection of mosgnito ovaries is accompanied by a list of
important references pertaining to this procedure.

13827-68

13828-68
HISTOCHEMICAL EPPECTS OF APHOLATE ON THE REPRODUCTIVE ORGANS OF SOUTHERN CORN ROOTWORM.
C E Mendoza D C Peters
J Econ Entomol 61(2):416-42D REP
Apr 1968 421 3822
Apholate, Riochemistry, Diabrotica undecimpunctata howardi, Insect histology, Reproductive organs.
Abstract

13829-68
AN EVALDATION OF RAITS FOR COCKROACHES.
M D Miesch D E Howell
Pest Contr 35(6):16,18,2D
Jnn 1967 449.8 EXB
Raits, Rlattidae, Dichlorvos, Insect hehavior, Insecticides.

TRE PREE AMINO ACIDS IN TRE HAEMOLYMPH OF TRE MATURING ADDLT ROLL WEEVIL, ANTHONOMUS GRANDIS ROHEMAN.

N Mitlin G Wiygnl J Mauldin
Compar Riochem Physiol 25(1):139-148 REP
Apr 1968 444.8 C73
Amino acids, Anthonomus grandis, Rlood chemistry,
Quantitative analysis.
Ahstract:

1. Free and hydrolyzed free amino acids the haemolymph of the holl weevil were identified, and the amonnts present dnring the first 5 days of adnlthood were estimated.

2. In all, thirty ninhydrin-positive compounds were found, and of these, twenty-six were identified and, in most cases, guantitated.

3. Differences were found in both the titer of the total amino acids on a daily hasis and in the amonnts of individual amino acids, particularly tyrosine.

4. Total nitrogen levels varied with hoth sex and age. hnt amino nitrogen levels remained constant.

1831-68

RE-POPULATION OF THYSANOPTERA IN AREAS PREVIOUSLY TREATED WITH ALDRIN, HEPTACRLOR, AND DIELDRIN.

W C Moye W H Luckmann
J Econ Entomol 59(3):732-735
Jnn 1966 421 J822

Reptachlor.

13832-68
THE STAGES OF SPANOGONICUS ALROPASCIATDS AND THEIR DEVELOPMENT (REMIPTERA: MIRIDAE).
M S Musa G D Rutler
Kans Entomol Soc J 40 (4):596-6DD
Oct 1967 420 K13
Reans, Cotton, Insect nntrition, Insect physiology, Metamorphosis, Miridae, Spanogonus albofasciatns.
Abstract

13R33-68
INSECTS AND THEIR WORLD. ED. 2. QL463.D4.
H Oldroyd
144 P. REP LONDON RRITISR MUSEUM (NATURAL RISTORY)
1966
Insects.

13834-68
ARRIAL APPLICATION OP INSECTICIDES POR CONTROL OP ALPALPA WEEVIL.
R C Pass P W Knapp
J Econ Entomol 59 (3):648-650
Jun 1966 421 J822
Aerial spraying, Hypera postica, Insecticides.

I3R35-68

PULSED ULTRASONIC SOUND FOR CONTROL OF OVIPOSITION RY
CARRAGE LOOPER MOTHS.

I L Payne H H Shorey
J Econ Entomol 61(1):3-7 REP
Peb 1968 421 J822

Rroccoli, Lettnce, Ovulation, Sound waves, Trichoplusia ni,
Ultrasonic waves.
Abstract

13836-68
A NEW SPECIES OP CERCOTHRIDS HOOD PROM MADAGASCAR (THY-SANOPTERA).
J Pelikan
Acta Ent Rohemoslov 64 (5):364-37D
1967 420 C33
Cercothrips priesneri.
Includes key to known spp.

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13837-66
A LIGHTWEIGHT, •EATHER-RESISTANT FIELD INSECT CAGE.
C D Pless
J Econ Entomol 61(2):501-503
Apr 1568 421 J822
Aphididae, Insect cages, Tohacco.
Abstract

13838-68
THE NATURE OF ACRECMOFACTER NEMATOPHILUS AS AN INSECT PATHOGEN.
G O Pcinar G M Thomas
J Invertebrate Pathol 9(4):510-514 REP
Dec 1967 421 J826
Achromotacter nematophilus, Caterpillars, Galleria mellonella, Insect diseases, Nematodes, Neoplectana.
Abstract

13839-66

INFLUENCE OF CORPUS ALLATUM ON REPRODUCTION OF FEMALE 1PHITA LIMBATA STAL (HEMIPTERA).

V K K Prabau F I Ittycheria K K Nayar
Acta Fnt Bohemoslov 64(5):335-343
1966 420 C33
Corpora allata, Ighita limbata, Reproduction.

13840-68

INPLUENCE OF PHOTOPERIOD, TEMPERATURE, AND POOD ON INITIATION OF DIAFADSE IN THE APPLE MAGGOT.

R J Prokopy
Can Fotcmol 100(3):318-329 REF
Mar 1568 421 C16
Apples, Insect eggs, Insect physiology, Larvae,
Photoperiodism, Rhagoletis pomonella, Temperature.
Abstract: Diapause initiation independent of photoperiod or temperature in eggs and adults, but dependent in pupae.

13841-68
UPTAKE OF P32 BY YELLOW-FEVER MOSQDITO LARVAE OF EQUAL AGE,
AND THOSE PUPATING SYNCREONOUSLY: ITS LOSS AND TRANSPER
DURING DEVELOFMENT, MATING, AND OVIPOSITION.
M S QUraishi
J Econ Entomol 61(2):53D-533 REF
Apr 1968 421 J822
Aedes aegypti, Insect physiology, Larvae, Phosphorus isotopes,
Radioactive tracers, Reproduction.
Abstract

13842-68
STUDIFS OF INSECTICIDE RESISTANCE IN FLORIDA MOSQDITOES.
C B Rathburn A H Foike
Mosquito News 27(3):377-382 REF
Sep 1967 421 M85
Chemical control (insects), Chlicidae,
Insecticide resistant insects

13843-68

NEW DATA TO THE BIOLOGY OF CAPNODIS TENEBRIONIS L.
(CCLECFIEFA).
G Feichart
Acta Zool (budapest) 13(3-4):395-408 REP
1967 410 AC85
Capnodis tenebrionis, Fruit, Insect biology, Insect pests.

13R44-6R
EPFECT OF 6-AZADRIDINE ON THE DEVELOPMENT OF THE OVARIES IN THE HCDSE FLY MUSCA DOMESTICA L. (DIPTERA).
R Rezahova V Landa
Acta Ent Rchemoslov 64(5):344-351 REF
1966 420 C33
Azauridine, 6-, Biochemistry, Insect physiology,
Musca domestica, Nucleic acids, Ovaries.

13845-68
PEEDING OF HORSEPLIES (DIPTERA: TABANIDAE) ON PLANT JUICES.

R H Roberts
Entomol News (philadelphia) 78(9):250-251
Nov 1967 421 EN88
Peeding, Insect behavior, Plant extracts, Quercus, Tabanns.

13846-6B
INFLDENCE OF TEMPERATURES AND LIGHT REGIMENS ON DIAPADSE OF SAMIA CYNTHIA FEYFFI.
J D Rosenthal W N Sullivan V E Adler J U McGuire
J Econ Fntomol 61(2):578-579
Apr 1968 421 JB22
Insect physiology, Light, Samia cynthia pryeri, Temperature.

13847-68
COPPLATION AND SPERM INDDCTION BY NORMAL AND PALPLESS MALE LINYPHIID SPIDERS.
J S Rovner
Science 157 (3790): 835
18 Aug 1967 470 Sc12
Insect anatomy, Linyphia triangularis, Reproductive organs, Sex behavior, Spiders.
Abstract

3848-68
TEMPERATURE-INDUCED WING MALPORMATION IN ALPALPA LOOPERS AND VARIEGATED COTWORMS.
J Schafer P Gran L C Terriere
J Econ Entomol 61(2):575-576
Apr 1968 421 JR22
Autographa californica, Insect abnormalities,
Insect nutrition, Peridroma saucia, Temperature.

3849-68

NATDBAL AND SYNTHETIC MATERIALS WITH INSECT HORMONE ACTIVITY. 3. JUVENILE BORNONE ACTIVITY OF DERIVATIVES OF P-(1,5-DIMETRYL-REXYL) BENZOIC ACID.

K Slama M Suchy F Sorm
BioI Bull 134(1):154-159 REF
Peb 1968 442.8 B52
Biological assay,
Dimethyl-hexyl) benzoic acid compounds, p-(1,5-, Rormones, Insects, Neodysdercus intermedins, Pyrrhocoris apterus.

Abstract

13850-68
THE NATURE OF CYSTS FOUND IN PUPAE AND ADDLTS OF NEODIFRION SWAINEI.
W A Smirnoff
Can Entomol 1D0(3):313-318 REP
Mar 1968 421 C16
Cysts, Neodiprion swainei, Pupae.
Abstract: Cysts are neither thmoral or virogenons. They are sometimes found in pupal intestinal cavity or adnlt abdcminal cavity. Cell proliferation did not occur, but cell precipitation and membrane formation did.

13851-6R
EFFECT OF GAMMA IRRADIATION ON FEMALE COLEX PIPIENS
QUINODEPASCIATOS.
Smittle
Pla Entomol 51(1):59-61 REP
Mar 1968 42D F662
Culex pipiens guinguefasciatos, Gamma rays, Insect eggs,
Ovulation, Sterility.
Abstract: Female 1-day old pnpae were exposed to 20D0 to
9000 R. The average number of eggs per egg raft decreased with an increase in dose, and at 7000 R and above
no eggs were deposited. The sterility produced by the
different exposures ranged from 12 percent at 20D0 R to
60 percent at 6DD0 R. Complete female sterility dne to
gamma irradiation is accomplished by inhibiting egg production.

13852-68
AN INTRODUCTION TO THE BEBAVIOR OF ANTS. QL568.P75R.
J H Sudd
2DD P. REP LONDON ARNOLD
1966
Pormicidae, Insect anatomy, Insect behavior.

13853-68
A NEW ATELEUTE FROM TRE UNITED STATES (HYMENOPTERA: ICHNEDMONIDAE).
H TOWNES
Entomol Soc Wash Proc 69(2):181-182
Jun 1967 42D W27
Astala confederata, Ateleute carolina, Ichnenmonidae, Insect taxonomy, Parasitic insects, Psychidae.

13854-68
IMPROVED XENIC DIETS FOR REABING THE SDGARCANE BORER IN PDERTO RICO.
D W Walker A Alemany A Quintana P Padovani K Hagen
J Econ Entomol 59(1):1-4
The 1966 421 JR22
Diatraea saccharalis, Diet, Insect rearing, Puerto Rico.

13855-68

DEVELOPMENT OF RESISTANCE IN THE SILKWORM, BOMBYX MORI, TO PERORAL INFECTION OF A CYTOPLASMIC-POLYHEDROSIS WIRDS. R Watanabe

J Invertehrate Pathol 9(4):474-479 REF Dec 1967 421 J826

Rombyx mori, Caterpillars, Insect disease resistance, Polybedroses. Abstract

13856-68

ELECTROFRORETIC SEPARATION OF THE REMOLYMPH PROTEINS IN THE PALL WEBNOBH, HYPHANTRIA CONEA, INPECTED WITH A NDCLEAR-POLYHEOROSIS VIRUS. H Watanabe J Invertehrate Pathol 9(4):570-571 Dec 1967 421 J826 Rlood plasma, Electrophoresis, Hyphantria cunea, Insect diseases, Polybedroses, Proteins.

SITE OF VIRAL RNA SYNTHESIS WITHIN THE MIGGUT CELLS OF THE SILKWORM, EOMRYX MORI, INPECTED WITH CYTOPLASMIC-POLYHEOGOSIS VIRUS. Watamabe J Invertebrate Pathol 9(4):480-487 REF Oec 1967 421 J826
Riochemistry, Rombyx mori, Caterpillars, Insect diseases, Insect physiology, Intestines, Polybedroses, RNA viruses. Abstract

13858-68

PERTILITY OF EGGS OF MEXICAN SEAN REETLES PROM PEMALES
MATED ALTERNATELY WITH NORMAL AND AFHOLATE-TREATED MALES. R E Webb F F Smith
J Econ Entomol 61(2):521-523 1968 421 J822 Apholate, Reans, Chemosterilants, Epilachna varivestis, Abstract

13859-68

STDDIES OF THE REMOLYMPH OF THE REE (APIS MELLIFICA'L.).

1. 8LCOO SMEAE PROM THE AOOLT. (PR) H wille M A Wecchi Schweiz Entowol Ges Mitt 39(1/2):69-97 15 Sep 1966 420 SW6 Apis mellifera, Blood plasma.

13860-68

ECDYSONE AND ECDYSONE-ANALOGOES: THEIR ASSAY AND ACTION ON OIAFADSING PDFAE OF THE CYNTRIA SILKWORM. M Williams Riol Eull 134 (2):344-355 REF Apr 1968 442.8 852 Riol Bull 134 (2):344-355 REF Apr 1568 442.8 852
Biological assay, Ecdysone, Hormones, Pupae, Samia cynthia. Abstract: Six ecdysones of plant origin are compared with synthetic alpha-ecdysone in terms of their ability to provoke normal or abnormal development of diapausing pupae and isolated pupal abdomens of Samia cynthia. The activity of the seven materials ranks in the following descending order: cyasterone, ponasterone R, ponasterone A, ponasterone C, alpha-ecdysone, beta-ecdysone, and inokosterone. All seven materials provoked adult development when injected in critical doses. All materials except alpha-ecdysone caused ahnormal development with excessive doses. Abnormal development is correlated with a telescoping of the early events in adult differentiation, followed by the precocious deposition of new cuticle. Sensitivity to excessive ecdysone or to juvenile hormone disappears simultaneously at about the 60th bour after the initiation of development. Excessive ecdysone apparently interferes with the cytological expression and implementation of genetic instructions for forming a normal moth. This action is compared to that of juvenile hormone. hormone.

RESPIEATORY ENVIRONMENTS OF GRAIN-INFESTING WEEVILS. I.

COMPASISON OF COLTDRE-JAR AND LABORATORY REARING-ROOM ATMOSPRERES.
J R Williams D A Wilhur J Econ Entomol 61(2):345-348 Apr 1968 421 J822 Atmosphere, Carbon dioxide, Oxygen, Sitopbilus zeamais, Storage, Wheat. Abstract

13862-68

TOXICITY OF PIVE CARBAMATE INSECTICIDES TO THE TWO-SPOTTED SPIDER MITE AND LARVAE OF THE SOUTHERN ARMYWORM AND TORACCO 8DOWORM. D A Wolfenbarger R E Redfern J Econ Entomol 61(2):580-581

421 J822 Anthonomus grandis, Carbamates, Heliothis virescens, Mortality, Prodenia eridania, Tetranychus urticae.

3863-68
THE LIPE HISTORY OF IPS CALLIGRAPHDS (COLECPTERA: SCOLYTIDAE) WITH NOTES ON ITS BIOLOGY IN CALIFORNIA.
O L Wood R W Stark
Can Entomol 100(2):145-151 REP
Peb 1968 421 C16 Host specificity, Ips calligraphus, Pinus. Abstract

13864-68

THE KIND OF COCKROACHES WE FIND IN NORTH CAROLINA. C G Wright Pest Contr 35(8):46,48, Aug 1967 449.8 EX8 Blattidae, Insect behavior, Insect control, Insect identification.

Genetics

13865-68

THE INHERITANCE OF ABOOMINAL COLORATION IN THE CARNIO-EGYPTIAN HONEYREE RYSRID (HYMENOPTERA: APIDAE). M A El-Ramby
Soc Entomol Egypte Rull 49:109-112 1966 420 EG9
Apis mellifera. Insect genetics.

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AN ISOFLAYONE-DEFICIENT MUTANT IN TRIFOLIUM
SDRTERRANEUM INDUCED RY ETHYL METHANE-SULPHONATE.
C M Francis A J Millington
Australian J Sci 30(5):182
Nov 1967 475 AD72
Ethyl metbanesulfonate, Insect mutation, Isoflavone, Subterranean clover.

MOOES OF BALANCE IN THE POLYMORPHISM OF PHILAENDS SPDMARIDS (L.) (HOMOPTERA). O Halkka M Raatikainen T Vilbaste Suomalainen Tiedeakatemia Ann Ser A Iv Riol 107,16 P.,MAP 1967 442.9 H36 Genes, Insect genetics, Philaenus spumarius, Polymorphism. Abstract: Populations of P. spumarius display different gene frequency equilebria in different northern European areas.

13868-68

POPULATION GENETICS IN THE ABERICAN TROPICS. III. THE POPULATION GENETICS IN THE AMERICAN TROPICS. III. THE GENETIC ROLE OF HETEROXYGOUS INDIVIDUALS IN VARIOUS COLOMBIAN POPULATIONS OF D. MELANOGASTER.

H F Hoenigsberg L E Castro L A Granobles
Evolution 22(1):66-75 REP
28 Mar 1968 443.8 EV62
Drosophila melanogaster, Insect genetics, Insect populations.
Abstract: This article presents data on the quantity lethals and semilethals, and of guasinormals (subvitals, normals, and supervitals) present in natural populations from various environments in Colombia. Environmental differences permit some fundamental conclusions regarding from various environments in Colombia. Environmental differences permit some fundamental conclusions regarding the different population structures in their wild habitats in connection with the amount of genetic "load" in each nicbe. the authors compute the total "load" and the "drastic" component of it. Moreover, the amount of "drastic" genes which are eliminated through homozygosis and through heterozygosis is calculated from the available data.

13869-68

A GROSS ANALYSIS OF TWO OOT-RESISTANT HOUSE PLY STRAINS. R F Hoyer P W Plapp Jr J Econ Entomol 59(3):495-501 Jun 1966 421 J822 DDT, Musca domestica.

13870-68

CHROMOSOMES OF THE APHID GENDS OACTYNOTDS (HOMOPTERA). A T Olive Entomol Soc Wash Proc 69(4):303-306 Dec 1967 420 W27

10 13871-68

Aphididae, Chromosomes, Dactynotus,

13871-68
TWO TYPES OF SESAMEX-SUPPRESSIBLE BESISTANCE IN THE HOUSE-PLY.
F J Oppenoorth
Entomocl Ext Appl 10(1):75-86 BEP
1967 421 EN895
Ddt, Dichloro-2,2-bis (p-chlorophenyl) ethylene, 1,1-,
Insecticide resistant insects, Musca domestica, Sesamex.

Medical Entomology

3872-68

THE PRESENT STATUS OF LOW VCLUME (LV) AIB SPRAYS FOR CALIFCRNIA MOSCUITO CONTROL.

W E Burgoyne N 8 Akesson T L Mulhern K Phillips Mosquito News 27(3):398-407 REP
Sep 1967 421 M85
Aerial spraying, Chemical control (insects), Chlicidae, Insecticide application.

13873-68
SOME FACTORS APPECTING KILL OF THE STABLE PLY, STOMOXYS CALCITBANS (L.), WITH INSECTICIDAL THEBHAL AEBOSOLS.
E W Clements A J Rogers
Mosquito News 27 (3):374-377 REP
Sep 1967 421 M85
Chemical control (insects), Insecticidal aerosols, Naled, Stomoxys calcitrans.

13874-68
BLOOD MEAL SIZE OF LEPTOCONOPS KERTESZI (DIPTERA: CFRATCFCGCNIDAE).
J D Fculk
Mosquitc News 27(3):424 REF
Sep 1967 421 M85
Blood, Ceratopogonidae, Feeding, Insect behavior,
Leptoconops kerteszi, Rabbits.

3875-68
SUMMARY OF RECENT ABSTRACTS. III. MALABIA.
H M Gilles
Trop Dis Bull 65(3):213-218
Mar 1968 448.8 T752
Anopheles, Insect vectors, Malaria, Reviews.

J8876-68
THIOKOL SWAMP SFRYIE EQUIPPED WITH AUTOMATIC COMPRESSED AIR SEBAYING UNITS FOB APPLYING GBANULE AND LIQUID INSECTICICES.
J H Kimtall A H Thompson Mosquito News 27(3):420-422
Sep 1967 421 M85
Chemical control (insects), Chlicidae, Marshes, Spraying equipment, Vehicles.

MANATES AS A NATUBALISTIC BIOLOGICAL MOSQUITO CONTBOL METHOD.
J P Maclaren
Mosquito News 27(3):387-393 BEP
Sep 1967 421 M85
Biological control (insects), Biological control (weeds),
Culicidae, Manatees, Weeds.

13878-68
CULICOIDES CONTROL IN THE CANAL ZONE 8Y WATER MANAGEMENT.
J P MacIaren J L Hawkins W F Mubdoch 8 G 8ush
Hosguitc News 27 (4):513-519
Dec 1967 421 M85
Culicoides, Insect control, Water treatment.

3879-68
CIMEX HEMIPTEBUS (PA8B.) PROM BATS IN COLOM8IA, SOUTH
AMERICA (HEMIFTEBAI CIMICIDAE).
C J Marinkelle
Entomol Soc Wash Proc 69 (2):179-18U
Jun 1967 420 W27
8ats, Cimex bemipterns.

13880-68
BATE OF TICK ATTACEMENT TO A WHITE-TAILED FAWN.
G G Montgomery
Amer Midland Natur 79(2):528-530 BEF
Apr 1968 410 M58
Deer, Dermacentor variabilis, Ecology, Insect behavior,
Parasitism.
Abstract: A total of 59 American dog ticks (Dermacentor
variabilis) attached to a free-ranging, tame, white-tailed
deer fawn (Odocoileus virginianns) during a 26-day
period in July, 1964. The hourly rate of tick attachment was almost four times as great between evening and
morning collections as hetween morning and evening collections.

13881-68
VIRUS OF THE CALIFORNIA ENCEPHALITIS COMFLEX: ISOLATION FROM CULISETA INOBNATA.
O Morgante J A Shemanchuk
157 (3789): 692-693 8EF
11 Aug 1967
California encephalitis, Culicidae, Culiseta inornata, Insect vectors, Mammals.
Abstract

13882-68
YELLOW PEVER HOSQUITOES. IN: SMITE, C. N. INSECT COLONIZATION AND MASS PRODUCTION. QL497.S6.
H B Horlan
585-599 BEP
1966
Aedes aegypti, Insect rearing.

OVICIDAL ACTIVITY OF ALIPBATIC AMINES AND PETROLEUM OIL AGAINST TWO SPECIES OF MOSQUITOES.

H S Mnlla H P 8 Chandhnry
J Econ Entomol 61(2):510-515
Apr 1968 421 J822
Amines, Anopheles albimanns, Chemical control (insects),
Cnler pipiens guingnefasciatus, Kerosine, Ovicides.
Abstract

13884-68

8ESIDUAL ACTIVITY OF DIAZINON AND LINDANE POS CONTSOL OF LOIOSCELES BECLUSA.

8 8 Norment T L Pate
J Econ Entomol 61(2):574-575
Apr 1968 421 J822
Diazinon, Lindane, Loxosceles reclusa, Spiders.

13885-68
BIOLOGY OF CULEX TARSALIS DUBING THE SPRING SEASON IN OBEGON IN RELATION TO WESTERN ENCEPHALITIS VIRUS. WA 8 msh C H Tempelis Hosquito News 27 (3):307-315 BEF Sep 1967 421 HB5 Culex tarsalis, Insect biology, Insect vectors, Western egnine encephalomyelitis virus.

13886-68

SEASONAL VABIATIONS IN THE SUSCEPTIBILITY OF CULEX PIPIENS
L. TO DDT AND DIELDBIN.
N Service
Mosquito News 27(3):338-342 REF
Sep 1967 421 N85
Chemical control (insects), Culex pipiens pipiens, Ddt,
Dieldrin, Insecticide resistant insects, Variance analysis.

SUSCEPTIBILITY STUDIES ON ANOPBELES CULICIPACIES WITH DDT AND DIELDRIN IN GUJARAT STATE, INDIA. A M Shalaby J Econ Entowol 61(2):533-541 Apr 1968 421 J822 Anopheles culicifacies, Chemical control (insects), Ddt, Dieldrin, Insecticide resistant insects. Abstract

3888-68
EVALUATION OF PENTHION AND BAYGON MIXTURES FOR CONTROL OF ADULT AEDES AEGYPT: (L.) WHEN APPLIED AS THERMAL-POG.
O E Shipp W E Bazeltine
Hosquito News 27(2):144-149 BEF
Jun 1967 421 M85
Aedes aegypti, Chemical control (insects), Penthion,
Insecticidal aerosols, Isopropoxyphenyl methylcarhamate, o-,
Pesticide mixtures.

13889-68 COLONIZATION STOULES OF LEPTOCONOPS KERTESZI, BITING GNATS. R U Sjogren J D Fonlk Mosguito News 27(3):394-397 8EF Sep 1967 421 M85 Ceratopogonidae, Feeding, Insect behavior, Insect rearing, Leptoconops kerteszi, Reproduction. Abstract: Certain aspects of the biology of L. kerteszi biting gnats were studied in the laboratory. Adult gnats gnats contained in clothfloor feeding chambers readily fed on rabbits, mice, man and baby cbicks. Field-collected females had mated before feeding. Egg production from a rabbit blood meal averages 70-75 eggs per female, and anegg-to-adult generation was obtained in a damp sandvermicnlite-alfalfa meal rearing mixture in approximately three weeks at 90 30P. and r. b. 80 percent. No viable eggs were produced by blooded virgin females. Matings between newly-emerged adults contained in 2 cu. ft. volume plastic containers were not observed. Males swarm afield and larger mating chambers may be the answer to successful laboratory colonization. COLONIZATION STUDIES OF LEPTOCONOPS KERTESZI, BITING GNATS.

13890-68

laboratory colonization.

LITEBATURE SEPERENCES TO MOSQUITOES AND MOSQUITO-BORNE DISEASES. 8 Sollers-Riedel Mosquitc News 27(2):250-262 REP Jnn 1967 421 885 Animal diseases, Bibliography, Culicidae, Human diseases, Insect vectors.

13891-68

VERSATILE MOSCUITG TRAP. K M Schwerman R P Simmet Bosguito News 27(3):412-417 REP Sep 1967 421 M85 Sep 1967 421 M85 Culicidae, Insect collecting eguipment, Insect traps.

13892-68

A LCW COST ALEBOAT FOR USE IN MCSQUITO CONTROL. A H Thompson
Mosgnitc News 27 (3):417-419 REP
Sep 1967 421 M85 80ats, Culicidae, Insect control.

20 CROP PROTECTION

13893-68 REDUCTION OF CORN VIRUS UISEASE INCIDENCE AND CONTROL OF SOUTHWESTERN CORN BORER WITH SYSTEMIC INSECTICIDES. A J Keaster B L Pairchild J Econ Entomol 61(2):367-369 Apr 1968 421 J822 Chemical control (insects), Corn, Insecticides, Systemic insecticides, Virus diseases (plants), Zeadiatraea grandiosella. Abstract

PESTICIDES: PLANT PROTECTION. SB951.V6. M G Voronkov 163 P. 1967

Diseases

Pest control, Pesticides, Plant protection.

8895-68 KHARCHIA-65 A NEW RUST-RESISTANT WHEAT POR SALINE AREAS. S M Gandhi M P Bbatnagar Indian Parming 17(1)<:7,8,26 Mar 1968 22 IN283 Crop varieties, Plant disease resistance, Rust (wheat), Saline soils, Wheat.

HERITABLE ALBINISM IN SPHACELOTHECA REILIANA. P M Halisky Phytopathology 51(6):407-409 Jnn 1961 464.8 P56 Albinism, Spbacelotheca reiliana, Sphacelotheca reiliana.

13897-68 THE SPRAY WARNING SCHEME FOR CONTROL OF SUGAR SEET YELLOWS IN ENGLAND; SUMMARY OF RESULTS BETWEEN 1959-66. Plant Pathol 17(1):1-11 REF Mar 1968 464.8 P692 Aphis fabae, Insect outbreak forecasting, Myzus persicae, Spraying, Sngar beets, Virus diseases (plants), Yellows (sugar beets). Yellows (sugar beets). Abstract: Systemi sprays should be used during May and June when aphid vector population reaches 0.25 per plant. aphid infestation and yellows incidence are not proportional

13898-68 COMPARATIVE SURVIVAL OF REHYDRATED AND NONREHYDRATED WHEAT STEM RUST UREUOSPORES ON URY LEAF SURFACES. C R Leatbers Phytopathology 51(6):410-411 Jun 1961 464.8 P56 Leaves, Stem rust (wheat), Oredospores, Oredospores, Wheat.

13899-68 AN ASSOCIATION OF STEM RUST AND CROWN RUST RESISTANCE IN JOSTRAIN OATS.
R I B McKenzie J W Martens D J Samborski
Can J Genet Cytol 10(1):190-195 REP
Mar 1968 443.8 C16 Crown rust (oats), Pungns diseases (plants), Plant disease resistance, Puccinia coronata, Puccinia graminis, Stem rust (oats). Abstract

20 139U0-6B

13900-68
SOIL TESTING FOE CLUB ROOT IN DEVON AND CORNWALL.
S C Melville R H Hawken
Plant Pathol 16(4):145-147 REP
Dec 1967 464.8 P692
Clubroot (brassica), Fungus diseases (plants), Kale,
Plas@cdicphora brassicae, Rape, Soil fungi.
Reliable for forecasting disease incidence in susceptible
Brassica.

3901-68

EFFECT OF AICOHCLS ON SFORES OF SCLEROTINIA PRUCTICOLA AND CTHEE PEACH PRUIT-FOTTING FUNGI IN CALIFORNIA.

J M Cgawa S D Lyda
Phytopathology 50 (11):790-792
Nov 1960 464.8 P56
Alcohols, Fungi, Feaches, Sclerotinia fructicola, Spores.

13902-68
STUDIES ON RESISTANCE IN RADISH TO FUSARIUM CXYSPORUM F. CONGLUTINANS.
J L Peterson G S Found
Phytopathology 50(11):807-816
Nov 1960 464.8 P56
Fusarium oxysporum f. conglutinan, Radishes.

13903-6B
MECHANICAL TRANSMISSION OF COCONUT LETHAL YELLOWING.
W C Price A F Martinez D A Roberts
Fao Plant Frotect Eull 15 (6):105-108 REP
Dec 1967 421 F692
Coconuts, Lethal yellowing (coconuts),
Plant disease transmission.

THE RCLE OF LIGHT IN SPORE GERMINATION AND SPORIDIAL PRODUCTION OF THE WHEAT SMUT FUNGUS, TILLETIA CARIES (DC.) TUL. (GE)
K Schauz Arch Mikrohiol 60(2):111-123 REF 1968 442.8 AR26 Fungus diseases (plants), Light, Spore germination, Stinking smut (wheat), Tilletia caries, Wheat. English and German summaries Abstract: In Tilletia caries, light hastens spore germination and increases the number of spores which germinate. Light is reguired for two different steps, formation of germ tubes and sporidial development. Stimulation of spore germination is photoinductive; but hest sporidial development cours in continuous light of high intensity. High germination is induced when the light exposure occurs hetween the 3rd and 6th day after the spores were sowed on the medium. Best sporidia production results when the spores were irradiated at the 5th day or later. As in nearly all photoresponses in fungi, hlue light is more effective than green. No significant difference exists hetween the red light and dark experiments.

13905-6B
FUNCI ASSOCIATED WITH :PURPLE PATCH: OF SUBTERRANEAN
CLOVER IN WESTERN AUSTRALIA.
W A Shirton
Australian J Sci 30(2):65
Aug 1967 475 AU72
Ascochyta, Aspergillus, Pungus diseases (plants), Fusarium,
Phoma, Root rot (clover), Subterranean clover.
Purple Fatch a popular name applied to a root-rotting disease; Fusarium spr. most frequently isolated.

13906-6B
GENETICS OF RESISTANCE TO COTTON-LEAF CURL IN SAKEL COTTON (GOSSYPIUM BABBADENSE).
M A Siddig
J Agr Sci +london+ 70(1):99-103 REF
Peh 1968 10 J822
Crop varieties, Genes, Leaf curl, Plant disease resistance,
Plant genetics.
Ahstract: A dominant gene, and minor modifier genes,
control resistance to leaf curl.

3907-68

VERTICILLIUM WILT RESISTANCE IN PEANUTS (ABACHIS HYPOGAEA).

T E Smith
Phytorathology 51(6):411-412
Jun 1961 464.8 P56
Peanuts, Peanuts, Plant disease resistance,
Plant disease resistance,
Verticillium wilt,
Verticillium wilt.

13908-6B
BUBUS VIRUSES AND VIRUS DISEASES. (ABSTRACT).
R Stace-Smith
Rev Appl Mycol 47(3):97-109 REF
Mar 1968 450 R32B
Blackherries, Raspberries, Virus diseases (plants).

Arthropods

13909-68
SEX PHEROMONE OF THE COTTON LEAFWORM.
R S Berger
J Econ Entomol 61(1):326-327
Feh 1968 421 J822
Alahama argillacea, Sex attractants.

1910-68
SYSTEMIC INSECTICIDES FOR CONTROL OF ORIENTAL RAT PLEAS.
TESTS IN GUINEA FIGS.
P H Clark M M Cole
J Econ Entomol 61(2):420-423
Apr 1968 421 J822
Chemical control (insects), Guinea pigs, Insecticides,
Xenopsylla cheopis.
Abstract

13911-68
CONTROL OF THE TARNISHED PLANT BUG ON COTTON WITH SEVERAL INSECTICIDES.
T C Cleveland G L Smith
J Econ Entomol 61(2):566-567
Apr 1968 421 J822
Chemical control (insects), Cotton, Insecticides,
Lygus lineolaris.

13912-68
APRID TRAPPING WITH BLACK-LIGHT LAMPS.
B F Coon
J Econ Entomol 61(1):309-310
Feb 1968 421 J822
Insect vectors, Light traps, Macrosiphnm avenae,
Rhopalosiphnm maidis, Rhopalosiphnm padi, Schizaphis graminum,
Ultraviolet rays, Yellow dwarf (harley).
Abstract

13913-68
PESTS OF POPLARS AND PREVENTIVE AND CURATIVE METHODS OF CONTROL. SB608.P775D3.
C Dafauce
2 v.
1966
Porest insects, Insect control, Populus, Saperda calcarata.

13914-6B

EVALUATION OF EXPERIMENTAL INSECTICIDES FOR CONTROL OF HORNWORMS ON TOBACCO.

C B Dominick

J Econ Entomol 61(2):483-484

Apr 1968 421 J822

Chemical control (insects), Insecticides,

Mandnca guinguemaculata, Manduca sexta, Tohacco.

Abstract

13915-68
CHEMICAL CONTROL OF CHRYSANTEMUM LEAF MINER AND SOME
OBSERVATIONS ON VARIETAL PREPERENCE.
N French M E John A Wright
Plant Pathol 16(4):181-186
Dec 1967 464.8 P692
Chemical control (insects), Chrysanthemnm, Insecticides,
Phytomyza atricornis.

13916-6B
POPULATIONS OF BOLL WEEVIL IN SELECTED FIELDS IN ARIZONA
IN 1965 AND 1966.
R E Fye
J Econ Entomol 61(2):377-380,MAP
Apr 1968 421 J822
Anthonomus grandis, Cotton, Insect populations.
Abstract

13917-68
ALTERNATIVES TO DDT FOB THE CONTROL OF THE PEA MOTH ON DRY BARVESTING PEAS.
H J Gould T J Legovski
Plant Pathol 17(1):31-35
Har 1968 464.8 P662
Cbemical centrol (insects), Chlorinated hydrocarbons, Ddt, Pentbion, Insecticides, Lasreyresia nigricana, Methylthio-3,5-xylyl methylcarbamate, 4-, Peas.
Abstract:Pentbion known as Supracide and Bayer 37344 reduced pod infestation by over 90 percent. Other sprays gave little or no control.

13918-68
INSECTICIDAL CONTBCL OF MARDCA TESTULALIS ON COWPEA IN NICEBIA.

M L Jerath
J Econ Entomol 61(2):413-416
Apr 1968 421 J822
Carbaryl, Chemical control (insects), Cowpeas, Dieldrin, Marnca testulalis, Nigeria, Phosphamidon.
Abstract

13919-68
MITES OF CBATAEGDS AND AMELANCHIER IN HOOD RIVER VALLEY, OREGON.
C D Jorgensen
J Econ Entemol 61(2):558-562 REF
Apr 1968 421 J822
Crataegus, Mites, Serviceberries.
Pest and predaceons species
Abstract

13920-68
NEOMABASMIA SDSPICALIS WKR A NEW PYRALID LEAP-ROLLER OF SDGARCANE IN INDIA.
A N Kalra B David D K Banerji
Indian J Entomol 28 (4):554-556
Dec 1966 420 IN23
Insect pests, Larvae, Neomarasmia suspicalis, Pyralidae, Sngarcane.

13921-68
INSECT VISITORS TO PLOWERS OF BIDE LUPINE, LUPINDS ANGDSTIFOLIDS.
D B Leuck I Porbes R E Rurns J R Edwardson J Econ Entemol 61(2):573
Apr 1968 421 J822
Insect pollinators, Enpinus angustifolius.

3922-68
METROD OP LARCRATCRY SCREENING CP PEANUT GEBM PLASM FOR RESISTANCE TO THE IESSER COBNSTALK BORER.
D B Leuck J E Harvey
J Econ Intomol 61(2):583-584
Apr 1968 421 J822
Crop varieties, Elasmopalpns lignosellus, Peanuts, Plant pest resistance.

13923-68
EL SALVADOR. CCCURBENCE OF DIALEURODES CITRI ON GARDENIA.
J E Lipes
Fao Plant Frotect Eull 15(6):117
Dec 1967 421 F692
Dialenrodes citri, Gardenia, Zoogeography.
First record for Fl Salvador.

13924-68
SDPPRESSION OF FOPULATIONS OF DROSOPHILA MELANOGASTER IN
TOWATO FIFLD FLOTS WITH CHEMOSTERILANT BAITS.
H C Mascn F P Smith
J Econ Entemol 61(2):362-367
Apr 1968 421 J822
Apbolate, Baits, Chemical control (insects), Chemosterilants,
Diazinon, Drosophila melanogaster, Tomatoes.
Abstract

3925-68
NEMATORES ASSOCIATED WITH TREE-INFESTING INSECTS.
PAURODONTIDAE NEW FAMILY AND MISTICIINAE NEW SUBPAMILY
WITH A DESCRIFTION OF ONE NEW GENUS AND FOUR NEW SPECIES.
C L Massey
Can J Zool 45(5):779-786
Sep 1967 470 C16D
Dendroctonus fseudotsngae, Dirhabdilaimus carolinensis,
Forest insects, Hylobius pales, Mikoletzkya pierci,
Misticiinae, Misticins mnstus, Nematodes,
Pacbylobius picivorus, Paurodontidae, Pseudhalenchus hylobii,
Taxonomy.
Abstract

13926-68
DISTRIBUTION AND HOSTS OF SOME HORNTAILS (SIFICIDAE) IN BRITISH COLUMBIA.
E V MORTIS
Entomol Soc Brit Columbia Proc 64:60-63, MAP
01 Aug 1967 420 B77
Coniferae, Food plants, Forest insects, Siricidae,
Zoogeography-Abstract

13927-68
INSECT INJURY TO SODE CHERRIES IN THE ABSENCE OF INSECTICIDE SPERAYS.
E Oatman
J Econ Entomol 59(1):30-32
Feb 1966 421 J822
Sour cherries.

13928-68
DISTRIBUTION OF PLUM CURCULIO INJDRY IN A SOUR CHERRY
ORCHARD AND SAMPLING PROCEDDRES FOR DETERMINING THE EXTENT
OF INJURY.
E R Oatman E P Legner
J Econ Entomol 61(2):436-438
Apr 1968 421 J822
Conotrachelus nenupbar, Insect dissemination, Plant injuries,
Sour cherries, Statistical analysis.
Abstract

13929-68

VERTICAL-PULL TECRNIQUE FOR EVALUATING TOLERANCE OF CORN ROOT SYSTEMS TO NORTHERN AND WESTERN CORN ROOTWORMS.

E E Ortman D C Peters P J Fitzgerald

J Econ Entomol 61(2):373-375

Apr 1968 421 J822

Corn, Diabrotica longicornis, Diabrotica virgifera, Roots, Statistical analysis.

Abstract

13930-68
A NEW SALIX-INFESTING CHAITOPHORDS FROM SASKATCHEWAN (HOMOOTERA: APHIDIDAE).
W B Richards
Can Entomol 100 (2):181-184
Feb 1968 421 C16
Apbididae, *orest insects, Insect taxonomy, Salix.
Abstract

3931-68
EVALUATION OF SYSTEMIC INSECTICIDES INCORPORATED IN THE SOIL POR CONTROL OF LEPIDOPTERODS LARVAE OF COLE CROPS IN SODTHERN CALIFORNIA.
H H Shorey R L Bale
J Econ Entomol 60(6):1567-1570
Dec 1967 421 J822
Broccoli, Cabbage, Cauliflower, Chemical control (insects), Insecticides, Pesticide application, Pieris rapae, Plutella maculipennis, Soils, Systemic insecticides, Trichoplusia ni.
Abstract

13932-68

LABBLING LARVAE OF THE ELM SAWFLY WITH P32.

J D Stein

J Econ Entomol 61(2):508-510

Apr 1968 421 J822

Cimbex americana, Larvae, Leaves, Phosphorus isotopes,
Radioactive tracers, Salix alba.

Ingestion of radioactive foliage
Abstract

13933-68

DSE OF CHEMICAL DEFOLIANTS ON PEACH TREES IN INTEGRATED PROGRAM TO SUPPRESS POPPLATIONS OF GREEN PEACH APHIDS. G Tamaki R E Weeks
J Econ Entomol 61(2):431-435

Apr 1968 421 J822

Defoliants, Integrated control (insects), Myzus persicae, Peaches, Predaceous insects, Sodium chlorate, Syrphidae, Tributyl phosphorotrithioate, S,S,S-.
Abstract

13934-68
EFFECT OF VARYING POPDLATIONS OF RDSSBOLA FDSCA LARVAE
ON THE GROWTH AND YIELD OF MAIZE.
E S Dsua
J Econ Entomol 61(2):375-376
Apr 1968 421 J822
Busseola fusca, Corn, Crop yields, Insect populations, Larvae,
Plant physiology.

20 13935-6B

Abstract

13935-68

OBSERVATIONS ON CROP PESTS IN THE SUDAN IN 1966/1967. T V Venkatraman E El Khidir Fao Plant Frotect Bull 15(6):115-116 Dec 1967 421 F692 Crops, Insect pests.

13936-66
STULIES ON CHEMICAL CONTROL AND GENERAL BIOLOGY OF
SUGAB-CANE MOTH BEREES AT TANGANYIKA PLANTING COMPANY,
ARUSHA-CHINI, TANZANIA, 1966--1967.
J N Waiyaki
Arusha Trop Pesticides Res Inst Misc Rep 615,14 P. BEP
Apr 1967 423.92 G7922
Chemical Control (insects), Chilo zonellus, Eldana saccharina,
Insect biology, Sesamia calamistis, Sugarcame.

13937-66

EFFECTS OF SOIL FERTILITY ON ABUNDANCE OF GREEN PEACH
APHICS ON MARYLAND TOBACCO.
A W Wcoldridge F F Barrison
J Fcon Entomol 61(2):387-391
Apr 1968 421 J822
Insect populations, Myzus persicae, Soil fertility, Tobacco.
Abstract

Nematodes

13938-68
CHANGES ASSOCIATED WITH PARASITISM IN NEMATODES. I. MORFHCLOGY AND PHYSIOLOGY OF PREPARASITIC AND PARASITIC LARVAE OF MELOIDOGYNE JAVANICA.
A F Bird
J Parasitol 53 (4):768-776 REP
Aug 1967 448.8 J824
Meloidogyne javanica, Plant nematodes.
Abstract

13939-68
CONTROL OF THE SOC WEBWORMS CRAMBUS TETEBRELLUS, C. TRISECTUS, AND C. MUTABILIS, IN KENTUCKY.
B C Pass
J Econ Entomol 59(1):19-21
Peb 1966 421 J822
Kentucky, Sod webworms.

13940-68
A TECHNIQUE FOR ISCLATING AND MAINTAING CULTURES OF MELCILOGYNE.
J R Shepperson w C Jordan Helainthol Soc Wash Proc 35(1):106-108 REP Jan 1968 436-9 H36
Begonia, Meloidogyne incognita, Nematology, Plant nematodes, Tomatoes.
Abstract: Pure cultures can he established in aerial organs of Begoria and tomato plants. By inoculating stems with glass capillary tunes containing sterile eggs or larvae, several generations of the nematodes are produced in a single host plant. worms that develop in aerial organs are not exposed to soil-borne contaminants. Egg sacs that protrude through the stem epidermis are easily accessible and can he removed from the plant with forceps. Midribs of Begonia plants support growth of nematodes and produce a copious supply of material for various investigations.

13941-6B
A SCIL FOPULATION STUDY OP DITYLENCHUS DIPSACI (KUHN)
PILIPJEV IN AN ALFALFA PIELL.
S-t Tseng K B Allred G D Griffin
Helminthol Soc Wash Proc 35(1):57-62 BEF
Jan 1962 436.9 H36
Alfalfa, Ditylenchus dipsaci, Nematodes, Population,
Soil microorganisms.
Abstract: A population of Ditylenchus dipsaci showed a
seasonal fluctation in Millville silt loam collected from
an alfalfa field. Peak populations occurred when the soil
temperature was approximately 15 C, and the greater the
deviation from this temperature, the smaller the nematode
population. Nematodes approached their peak at the 10-40
cm levels 2-3 weeks later than those at 0-10 cm, when

temperatures were well helow 15 C in the fall and ahove 15 C at the 0-10 cm level. This significant time lag at 10-40 cm might indicate a nematode migration toward a more desirable temperature.

Weeds

13942-68
A TOP FARMEB LOOKS AT HERRICIDES.
H B Barnes
Agr Chem 23(2):16-1B
Peh 1968 381 AG8
Chemical control (weeds), Herhicides, Spraying equipment,
Weed control.

13943-68
THE IDENTIFICATION OF WEED SEEDLINGS OF PARM AND GARDEN SR613 .67C42.
R J Chancellor
88 P. OXFORD, BLACKWELL
1966
Gardens, Bahitats, Seedlings, Weeds.

13944-68
SCREENING OF PHYTOPBAGOUS INSECTS FOB BIOLOGICAL CONTBOL OF WEEDS.
P Barris B Zwolfer
Can Entomol 100(3):295-303 REP
Mar 1968 421 C16
Beneficial insects, Biological control (weeds).
Abstract: It is necessary to demonstrate the host
specificity of an exotic phytophagons insect hefore introducing it for the hiological control of a weed. The
'starvation test' made on economic plants is considerated
inadeguate. It is proposed that studies include the following: (1) the insect's hiology, host-plant records, and
adaptations, (2) plants attacked by related insects, (3) lab
host range of the insect, (4) chemical or physical basis of
host-plant recognition, (5) starvation tests, (6) insects
potential effectiveness for weed control.

13945-68
THE CINNARAR MOTH, TYRIA JACOBAEAE, FOR CONTROL OF TANSY BAGWORT.
R B Hawkes
J Econ Entowol 61(2):499-501
Apr 1968 421 J822
Arctiidae, Beneficial insects, Biological control (weeds), Poisonons plants, Senecio jacobaea, Tyria jacobaeae, Weeds. Abstract

HERBICIDES OR OAT COMPANION CBOPS FOE ALPALFA ESTABLISHMENT AND FOBAGE YIELDS.

C A Knst
Agron J 60(2):151-154 BEP
Mar 1968 4 AM34P
Alfalfa, Chemical control (weeds), Crop yields, Porage plants, Herhicides, Oats.
Abstract: Alfalfa was established with herhicides in 1964, 1965, and 1966. The object was to determine forage yields ohtained from a pure alfalfa stand in the seeding year and to compare them with yields obtained from oat companion crops removed at an immantne stage for silage or hay.
Alfalfa established with herhicides was comparatively unproductive during the seeding year and much higher forage yields were ohtained when alfalfa was established with an oat companion crop and both harvested as forage.

Other Pests

13947-68 METAL HOSE SIMPLIFIES BIRD BAIT APPLICATION. D Lieb Pest Contr 35(11):50 Nov 1967 449.8 EX8 Attractants, Baits, Bird control, Metal hose, Pigeons.

30 LIVESTOCK PROTECTION

13948-68 EFFECTS OF OXYTOCIN ADMINISTERED DURING THE DRY PERIOD ON THE SUCEEDING LACTATION. THE SUCREDING LACTATION.

G M GORMAN E W Swanson

J Dairy Sci 51(1):60-66 REP

Jan 1968 44.8 J822

Cattle, Lactation, Oxytocin.

Abstract: Oxytocin treatment produced milk let-down and delayed regression of udder size in dry cows. After partnrition, milk yields of treated cows were below those of their pair mates.

Diseases

13949-68 INTESTINAL PROTOZOAN INFECTIONS IN DOGS. Amer Vet Med Ass J 150(8):880-883 REP 15 Apr 1967 41.8 AMS 15 Apr 1967 41.8 AM3
Dogs, Infectious diseases, Intestines, Protozoa, Surveys.
Abstract: A survey was made of intestinal protozoa
harbored hy 600 stray dogs from central New Jersey.
Over one-third had Giardia canis, one-fifth had
Trichomonas hominis, over one-fifth had 1 or 2 species of
coccidia (Isospora higemina, Isospora canis, or
Isospora rivolta), and 6 dogs had amebic infections
(5 Entamoeba histolytica, 1 Entamoeba hartmanni).

ANTIMICROBIAL EFFECT OF COCOA ON SALMONELLAE. P P Busta M L Speck Appl Microbiol 16(2):424-425 Peb 1968 448.3 AP5 Bactericides, Cocoa, Salmonella gallinarum, Salmonella typhimurium.

3951-68
PSEUDOCOWPOX IN DAIRY CATTLE.
N F Cheville D J Shey
Amer Vet Med Ass J 150(8):855-861 REP
15 Apr 1967 41.8 AM3
Cattle, Diagnosis, Electron microscopy, Pseudocowpox.
Abstract: Pseudocowpox (paravaccinia) virus infection was diagnosed in a herd of lactating cattle. Pox lesions developed rapidly, then nicerated and became infected with bacteria and fungi. Rapid diagnosis was accomplished by electron microscopic examination of vesicular fluid and ultra-thin sections of vesicular areas within the lesion. Virus obtained from lesions produced cytopathic changes in primary hovine kidney cell cultures and caused pox lesions in cattle infected experimentally. The virus did not infect rabbits or chicken embryos. 13951-68

TETRALOGY OF FALLOT IN THE DOG. DR Clark JN Ross R L Hamlin CR Smith Amer Vet Hed Ass J 152(5):462-471 REP O1 Har 1968 41.8 AH3 O1 Mar 1968 41.8 AM3
Ahnormalities, Dogs, Heart.
Ahstract: Tetralogy of Pallot, a complex congenital malformation of the heart, has been diagnosed recently in 4
young dogs. In 2 of these, the diagnoses were later confirmed by postmortem examination. The affected dogs had
signs similar to those described in children with
tetralogy of Pallot: (1) limited tolerance to exercise,
(2) poor physical development, (3) cyanosis, and (4)
polycythemia.

3D 13953-68

13953-68 EFFECT OF LEVELS OF CALCIUM AND LYSINE UPON THE GROWTH OF ASCARIDIA GALLI IN CHICKS. M Cuca A C Todd M L Sunde J Nutr 94(1):83-88 REF Jan 1568 389.8 J82 Ascaridia galli, Calcium, Chicks, Lysine. Abstract

13954-68

PARTIAL PDRIFICATION OF THE ORGANISM OF PSITTACOSIS GROWN
IN CHICKEN EMBRYO YOLK SAC.
W G Dorsey W N Shirley W C Patrick
Appl Microtiol 16(1):166-167
Jan 1968 448.3 AP5
Chick embryos, Culture media, Miyagawanella group viruses,
Fsittacosis, Yolk sac.

13955-68

BLOCD CONCENTRATION STDDIES IN CATTLE OF A SUSTAINED-RELEASE T Ellison S F Scheidy S Tucker G C Scott C B Bucy Amer Vet Med Ass J 150(6):629-633 REP 15 Mar 1967 41.8 AM3 Blood analysis, Cattle, Drug therapy, Sulfamethazine.
Abstract: A sustained-release form of sulfamethazine was investigated in beef and dairy cattle. Effects of production-batch and animal variabilities indicate this is a usethen batten and animal variabilities indicate this is a useful form that will produce and maintain effective therapeutic blood levels as long as 5 days. Concomitant treatment with sulfamethazine in both parenteral and sustained-release forms established high blood levels, as well as prolonged maintenance of therapeutic levels after a single dose.

13956-68

A TISSUE-CULTURE, MODIFIED LIVE-VIRUS, RABIES VACCINE FOR DOGS: REPORT ON DEVELOPMENT AND CLINICAL TRIAL. J B Emery A Y Elliott D E Bordt G B Burch E E Kugel Amer Vet Med Ass J 152(5):476-482 REF D1 Mar 1968 41.8 AM3 Dogs, Rabies virus, Tissue culture, Viral vaccines.

13957-68

PERCENTAGE OF THE PROPERTY OF Horses, Spcrotrichosis, Sporotrichum schenckii.

FACTORS AFFECTING THE DEVELOPMENT OF NUTBITIONAL MUSCULAR DYSTROPHY IN NORTHERN CNTARIO. Hiddicglou K J Jenkins
Can J Anim Sci 48(1):7-14 REF
Apr 1968 41.8 C163
Animal nutrition, Calves, Deficiency diseases, Muscular dystrophy. Abstract

13959-68

THE PRODUCTION OF A BASIC IMMUNITY AGAINST PULP KIDNEY DISEASE. B C Jansen
Onderstepoort J Vet Res 34(1):65-80 REP
Apr 1967 41.8 ON1
Antigens, Enterotoxemia, Immunization, SheepAbstract: A single dose of alum-precipitated epsilon toxoid
(APT) produces transitory immunity to susceptible sheepMaxisum immunity results from two 90 Lf injections. The
time interval may be two to six weeks.

13960-68

BACTERIAL ENDCCARDITIS IN A DOG. K L Jeffery Amer Vet Med Ass J 151(11):1453-1455 REF 01 Dec 1967 41.8 AM3 Bacteria, Diagnosis, Dogs, Endocarditis, Penicillin, Therapeutics.
Abstract: Eacterial endocarditis was diagnosed antemortem in a dog on the basis of clinical signs and laboratory findings. A positive diagnosis was made at necropsy when the patient did not respond to treatment.

13961-68

BIOCHEMICAL AND PATHOLOGICAL EFFECTS OF APLATOXIN POISONING IN DUCKLINGS.
T Juszkiewicz J Stec B Stefaniak Z Bakalska Z Madejski Vet Bec 81(12):297-298 REP 16 Sep 1967 41.8 V641

Aflatoxin, Biochemistry, Ducklings, Poisoning.

13962-68

BOVINE TUBEBOULOSIS ERADICATION IN WISCONSIN. A R McLaughlin Amer Vet Med Ass J 151(1D):1343-1346 REF 15 Nov 1967 41.8 AM3 Cattle, Mycobacterium bovis, Serodiagnosis, Surveys, Tuberculin, Tuberculosis. Abstract: A survey of bovine tuberculosis eradication activities in Wisconsin revealed that trace-back testing was more efficient than rontine testing in locating bowine tuberculosis. Some of the reactors found by routine testing were probably sensitized by organisms other than Mycobacterium bowis. Causes of heterospecific tuberculin sensitivity are briefly discussed. sensitivity are briefly discussed.

DRETHROADENOCYSTITIS IN THE MALE CAT. P W Meier Amer Vet Med Ass J 151(8<) 1059-1071 BEP 15 Oct 1967 41.8 AM3 Animal histology, Cats, Cystitis, Psendomonas, Snlfnric acid, Urogenital system. Abstract: Eleven cases of lower urinary tract disease in male cats were clinically investigated. Pseudomonas was isolated and culturally identified in every case. A method of differentiating between obstructive and nonobstructive forms of disease was based on palpable characteristics of the urinary hladder. Necropsy findings and lesions in this disease and characteristics of pseudomonas organisms are compatible. Treatment with a wire loop and snlfnric acid solution was successful.

13964-6B

SYSTEMIC CANDIDIASIS IN CALVES ON PROLONGED ANTIBIOTIC THERAPY. J H L Mills B S Birth J H L Mills B S Birth
Amer Vet Med Ass J 150(8):862-870 BEP
15 Apr 1967 41.8 Am3
Antibiotics, Calves, Candida albicans, Moniliasis.
Abstract: Two young calves developed systemic candidiasis
in association with repeated antibiotic therapy. The fungus
(Candida albicans) was identified histologically in lesions
in the liver, lungs, brain, kidneys, and forestomachs and
recovered in pure culture from some of these organs. A
3rd calf had mycotic lesions confined to the phatynx and
esophagns. esophagns.

13965-68

INCREASED SDSCEPTIBILITY TO BACTERIAL ENDOTOXIN OF PIGS WITH IRON-DEPICIENCY ANEMIA.
J C Osborne J W Davis Amer Vet Med Ass J 152(11):1630-1632 REP 01 Jun 1968 41.8 AM3 01 Jun 1968 41.8 AM3
Anemia, Baby pigs, Escherichia coli, Iron, Mortality, Toxins.
Abstract: Nursing pigs made anemic by withholding supplemental iron for 28 days after birth were no more susceptible to the lethal action of bacterial endotoxin than their littermates given iron. Four pigs given iron dextran intramuscularly at 3 days of age were not anemic and survived a dose of Escherichia coli endotoxin that was lethal to 3 of Hamemic littermates not given iron. 4 anemic littermates not given iron.

13966-68

CBYPTOCOCCOSIS IN A DOG. B A Price B D Powers Amer Vet Med Ass J 150(9):988-993 BEF 01 May 1967 41.8 AM3 Cryptococcosis, Cryptococcns neoformans, Dogs.

13967-68

PETAL ANKYLOSIS IN HOBSES ASSOCIATED WITH BYBRID SUDAN PETAL ANKILUSIS IN HOUSES ABOUT THE PRASTORE.

J T Prichard J L Voss
Amer Vet Med Ass J 15D (B):871-B73 REP
15 Apr 1967 41.B AM3
Ankylosis, Dystocia, Petal death, Poals, Horses, Ankylosis, Dystocia, Petal death, Poals, Borses, Poisonous plants, Sorghnm vulgare sudanense. Abstract: Seven Appaloosa mares, of varying ages and previously bred to the same stallion, at varions stages of pregnancy were allowed to graze on a hybrid Sudan grass pasture. Ponr mares had dystocia at term and gave birth to dead foals with ankylosis of the joints. Two mares gave birth to normal full-term live foals. One mare developed posterior ataria soon after grazing on the pasture and aborted. The 11-year-old stallion involved had bred approximately 200 mares previously, with no abnormal foals among the offspring. among the offspring.

1396E-68
MAGRESIUM DEFICIENCY SYNDROMES.
W A Bader
49 (4):69-71 REF
Apr 1968 41.E M812
Cattle, Oeficiency diseases, Magnesium.

JOSEPH CE OF LISTERIOSIS IN PENNSYLVANIA LIVESTOCK.

J C Schwartz
Amer Vet Hed Ass J 151(11):1435-1437 MAP, REF
O1 Dec 1967 41.R AM3
Cattle, Goats, Leptospirosis, Listeria monocytogenes,
Listeriosis, Livestock, Poultry, Rabbits, Swine.
Abstract: Fresent laboratory records of animal cases of
listericsis represent mainly those cases within easy
reach of the diagnostic laboratory. Of the 13 states and
Ontario in the Northeastern Conference on Avian
Diseases, Pennsylvania has reported most of the
listeric infections in poultry.

13970-68

RIASTCHYCOSIS WITH SECONDARY ANYLOIDOSIS IN THE DOG.

R F Sherwood J C LeMay R A Castellanos
Amer Vet Med Ass J 150(11):1377-1381 REF
01 Jnn 1967 41.8 AM3
Amyloidosis, Animal histology, Autorsies, Rlastomycosis, Oogs.
Abstract: Phimonary hlastomycosis with secondary amyloidosis of kidneys, liver, and spleen resulted in death of a
dog. These diseases were diagnosed on postmortem examination. Gross pathology finding showed enlarged lymph nodes
at the hase of the heart. Microscopically, large numbers of
Blastomyces were seen in lnngs, and mediastinal and abdominal lymph nodes. Amyloid depositions were found in the
kidneys, liver, and spleen.

STUDIES ON THE ANTIGENIC STRUCTURE OF MYCORACTERIA. II.
ANTIGINIC STRUCTURE AND LIPIO FRACTIONS OF MYCORACTERIUM
AVIUM AND AVIUM-LIKE STRAINS.
S Tubely
Acta Microbiol 14(4):317-322 REF
1967 448.3 AC84
Antigens, Lipids, Mycobacterinm avium.
Abstract

13972-68
MOTICE OF WITEDERWAL OF PETITION FOR FOOD ACCITIVES
DISETRICAZOLE, RESERPINE.
Ped Regist 33(121):921R
21 Jun 1968 L1.451
Blackhead, Disetridazole, Feed additives, Reserpine, Turkeys.

13973-68
MOTICE OF FILING OF PETITION FOR FOOD ADDITIVES
CRLORTETRACYCLINE, PENICILLIN, SULFAMETHAZINE.
Fed Regist 33(112):8513
08 Jun 1968 L1.451
Chlortetracycline, Feed additives, Penicillin, Sulfamethazine,
Swine.

13974-68

TRE SEROLOGICAL BELATIONSHIP OF SOUTH APRICAN ROVINE ENTEROVIRUS STRAINS (ECBO SA-I AND -II), AND THE GROWTH CRARACTERISTICS IN CELL CULTURE OF TRE PROTOTYPE STRAIN (ECRO SA-I).

D W Verwoerd R A Cellermann J Broekman K E Weiss Onderstepoort J Vet Res 34(1):41-52 REF Apr 1967 41.8 0N1

Rovine enteroviruses, Cattle, Radioactive tracers, Serological tests.
Abstract: the virus from cattle helongs to Weybridge serotype 134. Growth characteristics were studied. Its replicative cycle and effect on host cell metabolism, using isotope-labelling technics, resemble other enteroviruses. Inhibitors of cellular RNA and protein synthesis are produced normally even if virus is blocked by guantdine.

13975-68

ISOLATICN OF STREPTOCOCCUS EQUI FROM BURBOS.

W G Wisecur C Schroder N P Fage
Amer Vet Med Ass J 150(3):303-306 BEF

01 Feb 1967 41.8 AM3
Abdomen, Asses, Livestock diseases, Lymph nodes,
Streptococcus egui.
Abstract: A slowly developing dehilitating disease had
lesions with caseation and calcification of the abdominal
lymph glands. Streptococcus egni was routinely isolated
from lesions. Several screening methods were evalnated.
Culturing S. egni from nares exndate appeared reliable.

The clinical syndrome and lesions associated with S. equi infection is different in burros than that (strangles) seen in horses.

3976-68
ACUTE IMPECTIOUS BOVINE RHINOTBACHEITIS AND SALMONELLOSIS IN A DAIRY HERD.
G T Woods L E Hanson G H Svenson H E Rhoades
Amer Vet Med Ass J 152 (10):1530-1535 REF
15 May 1968 41.8 AM3
Antibodies, Cattle, Feces, Feed supplements, Milk,
Rhinotracbeitis, Salmonella typhimurium, Salmonellosis,
Abstract: Infectious hovine rhinotracheitis (IRR) and
Salmoneila typhimurium infection occurred in 75 dairy
cattle; 11 cows died and 12 aborted. The combination of the
2 diseases was characterized by rapid onset, decreased
milk production, profuse diarrhea, ahortion, and death.
Salmonella typhimurium was isolated from a dairy feed
supplement, a bulk milk sample, and from rectal samples.
Infectious hovine rbinotracheitis was diagnosed by a rise
in antibody titer. Necropsy findings in a cow consisted
primarily of ulcerations of the omasnm and abomasum.

Arthropods

13977-6R
SOME NOTES ON FLEAS (SIPHONAPTERA) OF DOMESTIC ANIMALS IN NORTHERN TANZANIA (EAST AFRICA).

J E Cooper
Entomologist (london) 101(1257):43-46 REF
Feb 1968 421 EN8
Ctenocephalides canis, Ctenocephalides felis,
Dipylidium caninum, Echidnophaga gallinacea, Livestock,
Parasitic insects, Pulex irritans, Tunga penetrans, Wildlife.

13978-68
INSECTICIDES FOR CONTROL OF THE CATTLE TICK AND THE SOUTHERN CATTLE TICK ON CATTLE.
R O Drummond S E Ernst J L Trevino O H Graham J Econ Entomol 61(2):467-470
Apr 1968 421 3822
Roophilus annulatus, Roophilus microplus, Cattle, Chemical control (insects), Insecticides.
Abstract

13979-68
CATTLE GRUE CONTROL EY DUST BAG APPLICATION OF COUMAPHOS IN SUMMEB.
J G Matthysse J E Lloyd J F Butler K Tillapaugh
J Econ Entomol 61(1):311-312
Feb 1968 421 J822
Butyl-2-chlorophenyl methyl methylphosphoramidate, 4-tert-, Cattle, Coumaphos, Dusting, Penthion, Hypoderma howis, Hypoderma lineatum.

13980-68

FIELD TEST TO DETERMINE THE EFFECTIVENESS OF COUMAPHOS AS A FEED ADOITIVE TO CONTROL HOUSE FLY LARVA UNDER CAGEO LAYERS.

J S Simco J L Lancaster Jr
J Econ Entomol 59 (3):671-672
Jun 1966 421 J822
Caged layers, Coumaphos, Feed additives, Larvae, Larvicides, Musca domestica, Ponltry, Systemic insecticides.

Parasites

13981-68

NEMATODIRUS OF OOMESTIC SHEEP, OVIS ARIES, IN THE UNITED STATES WITH A KEY TO THE SPECIES.

W W Recklund M L Walker
J Parasitol 53 (4):777-7R1 REF
Aug 1967 448.R JE24
Nematodirus, Sheep, Taxonomy.

30 13982-6B

13982-68

THE METABOLISM OF RADIOACTIVE FUNABLO ACID AND SOME OTHER SUBSTEATES BY WHOLE ADULT ECHINOCOCCUS GRANULOSUS (CESTCDA). C Bryaut D J Morseth Compar Biochem Physiol 25(2):541-546 BEF May 1968 444.8 C73 May 1968 444.8 C73
Carbon isotopes, Echinococcus granulosus, Fumaric acid,
Metabolism, Badioactive tracers.
Abstract: The uptake of fumarate by adult Echinococcus
granulosus does uct conform to the model of transport
based on the Michaelis-Menten theory. Fumarate is converted maiuly to soccinate, malate and alaniue, which are
formed in disproportionate amounts at high fumarate coucentrations. Metabolic pathways, determined by the utilization of radioactive substrates, are similar to those
described in the protoscolices by other workers.

THE ULTBASTRUCTUBE OF THE ALIMENTABY TRACT OF THE SKIN-PENETRATING LARVA OF NIPPOSTRONGYLUS BBASILIENSIS (KEHATODA) . D L Lee J 2001 154(1):9-18 REF Jau 1568 410.9 184p
Cytology, Gastrointestinal system, Nematodes,
Mippostrongylus brasilieusis.
Abstract: The structure of the alimentary tract of the
third stage iufective larva of Nippostrongylus
brasiliensis has been described. The cuticle which lines
the buccalcavity and oesophagus differs from that which
lines the mouth and covers the external surface of the
uematode. The oesophagus is a cellular structure and is
uot, as previously thought, a syncytium. The secretory
granules of the oesophageal glands are surrounded by a
multi-layered membrane which gives a myelinated appearance
to the granules. The cells of the oesophago-intestinal
junctiou are lined with cuticle and are presumably part of
the stomodaeum. The intestine is thin walled and the
cells hear short, widely spaced microvilli. The luneu of
the intestine contains whorls of membranes which are
probably phospholipid and could act as a food reserve for
the larva. The rectum and aums are lined with cuticle. Jau 1968 410.9 L84P

A COMPABATIVE STUDY OF THIAFFNDAZOLE AND PHENOTHIAZINE AS ANTHELBINTICS FOR THE CASTBCINTESTINAL NEBATODES OF THE GOAT. Ceylou Vet J 15(1):14-17 Mar 1967 41.8 C33 Authelmiutics, Gastrointestiual system, Goats, Nematodes, Phenothiazine, Thiazolyl)-henzimidizole, 2-(4-, Thiazolyl)-henzimidizole, 2-(4-.

ECONOMIC LOSSES DUE TO PARASITIC DISEASES OF LIVESTOCK IN CEYLCH. P Seueviratna Ceylon Vet J 15(1):5-8 Bar 1967 41.8 C33 Livestock, Farasitism.

40 COMMODITY PROTECTION

Arthropods

13986-68 J986-68
LABOBATORY TESTS WITH DICHLOBVOS APPLIED AS A WHEAT PROTECTANT AGAINST BICE WEEVILS.
B L Kirkpatrick P K Hareiu C V Cooper J Econ Entomol 61(2):356-35B
Apr 1968 421 J822 Chemical control (insects), Dichlorvos, Sitophilus oryzae, Stored products, Wheat. Abstract

Microbial Contamination

13987-68 COCONDY AND SALMONELLA INFECTION. COCOMBIAND SALEMENT INFECTION. OF Schaffner K Hosbach V C Bibit C H Watson Appl Microbiol 15(3):471-475, BEP May 1967 448.3 AP5 Coconuts, Food coutaminatiou, Salmonella, Soil hacteria. Salmonella in soil contaminate raw, unprocessed coconuts. Pasteurization at 80 degrees C for 8-10 minutes kills the

50 ENVIRONMENTAL CONTAMINATION

13988-68 INITIAL SCIL PENETRATION BY INSECTICIDE EMULSIONS USED FOR SURTERRANEAN TERRITE CONTROL. R R Eeal F L Carter J Econ Entcmol 61(2):380-383 Apr 1968 421 J822 Chlordane, Dieldrin, Emnlsions, Reptachlor, Insecticides, Soil permeability, Termites. Abstract

13989-68 TRE EFFECT OF SIMAZINE ON SOIL MICROORGANISMS. (POL) D KULinska Bocz Nank Boln 93(2):229-262 REF 1967 20.5 R59 Herhicides, Simazine, Soil microorganisms. English abstract Abstract

13990-68 WIRDS--ROSI SYSTEM FOR USE IN THE STUDY OF WIRDS REMOVAL. M S Shane S R Wilson C R Pries Amer Water Works Ass J 59 (9):1184-1186 REF Sep 1967 292.9 AB32J Riological assay, Chlorine, Wiruses, Water pollntion, Water treatment.

55 RESIDUES

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RESIDUE OF RENSULIDE IN TURPGRASS SOIL FOLLOWING ANNUAL TREATMENTS FCR CRABGRASS CONTROL.

S W Ringbam R E Schmidt
Agron J 59(4):327-329 REF
Jul 1967 4 AM34P
Agrostis, Rensnlide, Riological assay,
Cbemical control (weeds), Digitaria sangninalis,
Herhicide residnes, Milo, Soil contamination, Soil properties,
Turf.
Abstract: A series of experiments was nsed to evaluate
bensnlide treatments in terms of crahgrass control, soil
residne, leaching and effect on seedling establishment.
Annual treatments gave continuous preemergence control of
crahgrass in bentgrass turf. The turfgrass vigor was im-
proved. Rensnlide residne in soil was determined by
measuring the root growth of milo.
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13992-68 THE SUSCEPTIBILITY OF HOUSE FLYS BEARED UNDER VARIOUS PHOTO-PERIODS TO INSECTICIDE RESIDUES. A T Fernandez N H Randolpb J Econ Entomol 59(11):37-39 Feb 1966 421 J822 Insect rearing, Insecticide residnes, Musca domestica, Photoperiodism.

13993-68 PERSISTENCE AND RIOLOGICAL EFFECTS OF PARATHION RESIDUES IN WATERPOWL HABITATS. H S Hulla J O Keith F A Gunther J Econ Entomol 59(5):10R5-1090 Oct 1966 421 J822 Agnatic birds, Habitats, Parathion, Rana cateshei

13994-68 STUDIES ON THE ADSORPTION OF ARSENITES BY A FEW TYPICAL INDIAN SOILS. D K Sundd O P Ransal Indian J Appl Chem 29(1):23-26 1966 385 IN293 Adsorption, Arsenites, Calcinm, Insecticide residues, Ions, Magnesinm, Sesquioxides, Soil contamination, Soils. Abstract: Adsorption influenced by sesquioxides, clay, and amount of exchangeable Ca and Mg cations in the soil.

13995-68 NOTICE OF FILING OF PETITION REGARDING PESTICIDE CHEMICALS. Fed Regist 33(118):8856 18 Jun 1968 L1.451 Barley, Reans, Bay, Insecticide residues, Peannts, Pesticide analysis, Phorate, Straw, Tomatoes.

13996-68 TOLERANCES AND EXEMPTIONS FROM TOLERANCES FOR PESTICIDE CHEMICALS IN OR ON RAW AGRICULTURAL COMMODITIES. 1-METHOXYCARRONYL-1-PROPEN-2-YL DIMETHYLPHOSPHATE AND ITS BETA ISOMER. Ped Regist 33(121):9166-9167 21 Jun 1968 L1.451 Agricultural products, Insecticide residues, Isomers, Nevinphos, Tolerances.

13997-68 POOD ADDITIVES PERMITTED IN FOOD FOR HUMAN CONSUMPTION. 1-METHOXYCARRONYL-1-PROPEN-2-IL DIMETHYLPHOSPHATE AND ITS BETA ISOMER. Ped Regist 33(120):9071 20 Jun 1968 L1.451 Insecticide residues, Isomers, Mevinphos, Parsley, Tolerances.

1399R-68 TOLERANCES AND EXEMPTIONS FROM TOLERANCES FOR PESTICIDE CREMICALS IN OR ON RAW AGRICULTURAL COMMODITIES. DELETION OF REQUIREMENT TO ANALYZE CARROT TOPS FOR PESTICIDE RESIDUES. Fed Regist 33(118):8816 18 Jun 1968 L1.451 Carrots, Pesticide residnes, Regulation (pesticides).

55 13999-68

13999-68
NOTICE OF PILING OF PETITION REGARDING PESTICIDE CHEMICALS.
Fed Regist 33(118):8857
18 Jun 1968 L1.451
Dicamba, Grasses, Hay, Herbicide residues, Metabolites,
Pesticide analysis.

60 TOXICOLOGY

14000-68

LABORATORY EVALUATION OF PBOHISING SYSTEMIC INSECTICIDES IN GUINEA PIGS AGAINST OBTENTAL RAT PLEAS.
P H Clark M M Cole
J Econ Entomol 58 (1):83-87
Peb 1965 421 J822
Guinea pigs, Insecticides, Xenopsylla cheopis.

14001-68
TOXICITY STUDIES ON CYCLODIENE-SUSCEPTIBLE AND CYCLODIENE RESISTANT STBAINS OF THE CABBAGE MAGGOT.
C R Harris J L Hitchon
J Econ Entomol 59 (3):650-659
Jun 1966 421 J822
Hylemya brassicae, Resistance, Susceptibility.

14D02-68
THE EFFECT OF WARPABIN ON PLASMA CLCTTING TIME IN WILD BOUSE MICE (MUS MUSCULUS L.).
F P Rowe R Redfern
J Hyg 66(1):159-174 REP
Mar 1968 449.8 J82
Bishydroxycoumarin, Blood coagulation, Mice, Bodenticides, Warfarin.

14003-68
REPULSION OF GREEN SUNFISH BY CERTAIN CHEMICALS.
R C Summerfelt W M Lewis
Water Pollut Contr Fed J 39(12):2D30-2038 REP
Dec 1967 293.8 St8
Chemicals, Fish, Insect repellents, Insecticides, Pesticides.

65 PLANT PHYSIOLOGY AND BIOCHEMISTRY

14004-6R

ELEGOTAMINE PRODUCTION IN SOBMERGED CULTURE AND PHYSIOLOGY OF CLAVICERS FURFUREA. A M Amici A Minghetti T Scotti C Spalla L Tognoli Appl Microbiol 15(3):597-602 REF May 1968 448.3 AP5 Claviceps purpurea, Culture media, Ergotamine, Plant biochemistry, Plant physiology.

A strain producing large amounts of peptide alkaloids was compared with three producing little. the first could also accommlate lipids and sterols, used much sucrose and citric acid simultaneously, but the others used sucrose or citric acid in quantities, or a little of both.

14005-68

PACTOES IN FARAQUAT-INDUCED CBLOROSIS WITH PHASEOLUS POLIAR TISSUES. IISSUES. D L Barnes J Q Lynd Agron J 59 (4):364-366 REF Jnl 1967 4 MB34P Beans, Riological assay, Chlorosis (plants), Light, Paraquat, Plant injuries, Temperature. Abstract: Relative phytotoxicity was determined by varying herbicide levels from 0 to 1.0 ppm ai with light intensity, temperature and reaction time. Reduction of extractable chlorophyll was closely related to increased paraquat concentrations. Increased time, temperature and light intensity accelerated chlorosis sity accelerated chlorosis

14006-68

INTERACTION EFFECTS OF ATRAZINE AND CDAA, LINURON, AMIBEN, OR TRIPIURALIN CN SOYREAN GROWTH.
W G Espinoza R S Adams R Bebrens Agron J 60(2):183-185 Bar 1968 4 AM34P Amiben, Atrazine, Chloro-N, N-diallylacetamide, 2-, Herbicides, Linnron, Plant injuries, Soyteans, Trifluralin.

14007-68

ACCUMULATION OF SOCIUM AND CALCIUM BY SEEDLINGS OF SOME CEREAL CROES ONDER SALINE CONDITIONS. L Y George L Y George
Agron J 59 (4):297-299 REP
Jnl 1967 4 A834P
Barley, Calcinm, Grain, Ions, Photometry, Plant biochemistry,
Rice, Saline soils, Sodinm, Wheat.
Abstract: Rice accumulated more Na and Ca in both shoots
and rcots than either barley or wheat. Wheat accumulated
more Na and less Ca shoots than barley whereas the roots
bave less Na and more Ca than barley.

1400R-68
PLANT UPTAKE OF 14C-DIORON IN MCDIFIED SOIL. R G Rash K G Kash Agron J 60(2):177-179 REF Har 196E 4 AH34P Absorption, Chromatography, Clay soils, Diuron, Herbicides, Bydrogen-ion concentration, Metabolites, Oats, Plant translocation, Soil organic matter, Soil structure, Soil temperature.

14009-68

PATER CHROMATCGRAPBIC ANALYSIS AS A NEW TEST METBOD OF BACTEBICIDAL SUBSTANCES IN FLANT EXTRACTS AND POSSIRLE RELATIONS OF THESE SURSTANCES TO PLANT GROWTH INHIBITORS. (GE B Soding & Dorffling Arch Mikrobiol 60(2): 182-200 REF 1968 442.8 AR26 Chromatcgraphy, Peas, Plant extracts, Platanns, Serratia marcescens, Snnflowers. English and German summaries.

14010-68

SOIL MICRORIAL DECRACATION OF ALDRIN. C M In J R W Miles C R Harris Life Sci 7(6):311-322 REF 15 Mar 196R 442.8 L62 Aldrin, Pusarinm, Fenicillinm, Plant metabolism, Soil microorganisms, Trichoderma.

14011-6R

4011-6R
SALIMITY TOLERANCE OF SEVEN VARIETIES OF CREEPING BENTGRASS, AGROSTIS PALUSTRIS HODS.
V B Youngner O R Lunt F Nudge
Agron J 59 (4):335-336 REF
Jul 1967 4 Am34P
Agrostis palustris, Calcium chloride, Crop varieties,
Bydroponics, Sodium chloride, Turf.
Abstract: Significant differences were observed for salinity tolerance among creeping bentgrass varieties grown in solution cultures. Top growth of all varieties decreased with increased salinity.

14015-68

70 CHEMISTRY

14012-68 BEHAVIOR OF SYNTHETIC ORGANICS IN STRATIFIED IMPOUNDMENTS. Demarco J M Symons G G Boteck Amer Water Works Ass J 59(B):965-976 BEP Ang 1967 292-9 AM32J Aquatic bacteria, Biochemistry, D, 2,4-, Detergents, Herbicide residnes, Beservoirs, Water pollution.

14D13-68 INSECT SEX ATTRACTANTS. IX. CHEMICAL CONVERSION OF THE SEX ATTRACTANT OF THE CAPEAGE LCOPER TO THE SEX PREPROMONE OF THE FALL ARMYWORM. Jacobson C Barding J Econ Entomol 61(2):394-396 Apr 1968 421 J822 Hormones, Sex attractants, Spodoptera frugiperda, Synthesis, Trichoplusia ni. Abstract

14014-68 BOLL WEEVIL SEX ATTRACTANT: ISOLATION STUDIES. J H Thmlinson D D Hardee J F Minyard A C Thompson R T Gast J Econ Entcuol 61(2):470-474 REF Apr 1968 421 JB22 Absorption, Anthonomus grandis, Biological assay, Chromatcgraphy, Distillation, Sex attractants. Abstract

DID-OU SYNTHESIS OF S35-((METHYLTHIO)ABYL) FHOSPHOBOTBIOATES. S Y Young A Begum r S Berger J Econ Entomol 61(2):569-570 Apr 1568 421 J822 Phosphorothioic acid esters, Radioactive tracers, Sulfnr isotopes, Synthesis.

80 ENGINEERING

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14016-68 ATOMIZATION OF LOW-VOLDME MALATHION APRIAL SPRAY.
   D A Isler
   J Econ Entomol
Jnn 1966 421 J822
   Aerial spraying, Atomization, Malathion.
14D17-68
  4017-68
A METHOD OF RECOVERING EGGS OF THE WESTERN CORN ROOTWORM
PROM THE SOIL.
DE Lawson G T Weekman
J Econ Entomol 59(3):657-659
Jnn 1966 421 J822
Dishbering migrifush Roos Decot collecting continuent
   Diabrotica virgifera, Eggs, Insect collecting equipment.
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14018-68 A DNIT POB POBEDLATING GRANULAR INSECTICIDES. M S Mulla Mosquito News 27(2):199-2D1 REP Jnn 1967 421 M85 Equipment, Insecticides.

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